PERSONNEL PLACEMENT

15 FEBRUARY 1991

POSITIONS OPEN

ASSISTANT PROFESSOR

UNIVERSITY OF MARYLAND

Applications are invited for a tenure-track position at the assistant professor level in the Division of Hematology/Oncology, Department of Pediatrics, School of Medicine, University of Maryland at Baltimore. We are seeking a person with high promise in research who works in the cell biology and biochemistry of molecular approaches. Preference will be given to candidates with a strong theoretical background in the regulation of cell growth and differentiation and in the regulation of gene expression. Submit curriculum vitae, a statement of research interests, and three letters of recommendation to: Christopher N. Franks, M.D., Director, Division of Hematology/Oncology, Department of Pediatrics, Box 123, University of Maryland, 22 South Greene Street, Baltimore, MD 21201. The University of Maryland is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR

PHARMACOLOGY

The Department of Pharmacology and Toxicology at Michigan State University invites applications for a tenure-track position. Persons with research experience in any area of pharmacology are invited to apply although preference will be given to those with expertise in cardiovascular pharmacology, immunopharmacology, or molecular pharmacology. Applicants must have a Ph.D. in pharmacology or related field and postdoctoral experience. The successful candidate will be expected to establish an independent research program and continue to develop expertise and teaching skills in the field. Applicants should send curriculum vitae, a short summary of research plans, and the names of three references to: Chair, Search Committee, Department of Pharmacology/Toxicology, Michigan State University, B440 Life Sciences, East Lansing, MI 48824. MSU is an Affirmative Action/Equal Opportunity Institution.

ASSISTANT PROFESSOR OF SOIL CHEMISTRY

12-month, ten-track position (80%) research, 30% teaching. Position available 1 July 1991 and contingent upon funding by state legislature. Ph.D. in soil science, agronomy, or related area is required. Training and experience in soil chemistry with expertise in applying soil chemistry to crop production and environmental problems is preferred. Submit letter of application, current curriculum vitae, official transcripts, and three letters of reference no later than 1 April 1991 or until a suitable candidate is found to: Dr. T. W. Sammis, New Mexico State University, Department of Agriculture and Horticulture, Box 30003, Department 3Q, Las Cruces, NM 88003. Telephone: 505-646-3406. NMSU is an Equal Opportunity/Affirmative Action Institution.

Tenure-track ASSISTANT PROFESSOR position at the Pediatric Research Institute, St. Louis University. Applicants must possess an earned doctorate degree in biochemistry, cell/molecular biology, or related discipline and have potential to develop and sustain a funded independent research program. Interested individuals are invited to submit their current curriculum vitae and three reference letters to: Dr. S. Devaskar, Pediatric Research Institute, 3662 Park Avenue, St. Louis, MO 63110. Equal Opportunity Employer, M/E/H/V. Minorities and women encouraged to apply.

State University of New York (SUNY) Plattsburgh's Center for Earth and Environmental Research seeks a full-time, tenure-track ASSISTANT PROFESSOR beginning 26 August 1991. Ph.D. in environmental engineering oriented towards aquatic chemistry. Dedication to undergraduate education and ability to teach environmental chemistry and other environmental science courses. Research emphasis on pollutant fate and transport in lake/watershed ecosystems with preference in eco/toxicology, modeling and pollution problems in lakes and must be compatible with center's interests in Lake Champlain. Individual will also be responsible for teaching general chemistry and environmental science and have been a target for minority gender and gender concerns are encouraged to apply. Deadline is 15 March 1991 or until position is filled. Send resume, one letter of reference, recent summary of research interests and teaching philosophy to: Environmental Science Search Committee, c/o Office of Personnel/Placement, SUNY, Box 1706-246, Plattsburgh, NY 12901.

SUNY Plattsburgh is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL BOTANIST

ASSISTANT PROFESSOR. Tenure track; fall 1991. Botany, ecology, or environmental science Ph.D. Commitment to undergraduate education and ability to teach plant taxonomy, plant identification in the field, and one additional course. Experience in team-taught nonmajors laboratory course, environmental science, topics course, general education. Top independent liberal arts university near Chicago. Submit letter, curriculum vitae, and resumes to: University of Chicago, Department of Botany, 1130 East 57th Street, Chicago, IL 60637. University of Chicago is an Equal Opportunity/Affirmative Action Employer.

COLUMBIA UNIVERSITY

The Center for Molecular Recognition and the Department of Physiology and Cellular Biophysics invite applications for a joint, tenure-track ASSISTANT PROFESSOR position to bring together in one faculty individual using a variety of approaches to the molecular mechanisms of receptor and channel functions. Candidates should have doctoral and postdoctoral training in the biochemistry or biophysics of membrane receptors, channels, or transport proteins. Preference will be given to candidates with strong research accomplishments. Please submit curriculum vitae, bibliography, reprints, a summary of current research, a statement of research plans, and three letters of reference. Address applications to: Dr. Arthur Karush, Center for Molecular Recognition, Columbia University, 630 West 168th Street, New York, NY 10032.

Columbia University is an Equal Opportunity/Affirmative Action Employer.

CLINICIAN/INVESTIGATOR/EDUCATOR

PSYCHIATRISTS

OKLAHOMA UNIVERSITY MEDICAL CENTER

Access to state-of-art SPECT/MRI/MI and psychology laboratory facilities. Full-time, track. Salaries negotiable, depending on rank and experience. All applicants will be considered, especially those with interests in research and teaching. Interested persons should send curriculum vitae to: Dr. M. M. Hembree, Department of Psychiatry, University of Oklahoma Medical Center, 4200N. MacArthur Blvd., Oklahoma City, OK 73104. Oklahoma University is an Equal Opportunity/Affirmative Action Employer.

SURGICAL PATHOLOGISTS

ASSOCIATE/ASSISTANT PROFESSOR

The Department of Pathology at Fox Chase Cancer Center invites applications for two positions in the Department of Anatomic Pathology: one at the associate professor level and one at the assistant professor level. Requirements include Board certification in anatomic pathology. Candidates should have experience in surgical pathology with a special interest in tumor pathology and hematology and/or cytopathology. Whereas the positions involve primary responsibilities in diagnostic and/or research aspects of the practice, a commitment to basic research in the understanding of the neoplastic process and/or in the Gelding B. Ger system. The College of American Pathologists is highly desirable. Special training in the areas of immunopathology, molecular biology, histotechnology, and/or cell biology are welcome. Rank and salary commensurate with training and experience. Interested individuals should send curriculum vitae to: Search Committee for Surgical Pathologists, c/o Personnel Department, Fox Chase Cancer Center, 1111 North Woody Road, Philadelphia, PA 19111. We are an Equal Opportunity/Affirmative Action Employer.

PERSONNEL PLACEMENT
RESEARCH ASSISTANT PROFESSOR. Department of Pharmacology, University of Pennsylvania. Applicant must have advanced degree and at least 3 years of postdoctoral experience. Applicants for a faculty position to begin September 1991. Applicants should have a strong, ongoing research program in cellular or molecular immunology, independent research support, and significant teaching experience. Send curriculum vitae, statement of research interests, and names of three references to: Dr. Donald P. Brown, PhD, Professor, Chairman, Department of Pharmacology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6084. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

RESEARCH ASSISTANT PROFESSOR. An individual is sought at the level of assistant professor to fill a position in the area of immunotoxicology. The individual should have an established research program in the effect of metals on the immune system. The individual should also have expertise in flow cytometry and be able to conduct independent research, set up his/her own research program, and obtain grant funding. The successful individual will be expected to interact with a number of currently funded programs and offer advice and expertise in the areas of immunology and immunotoxicology. Send curriculum vitae and list of references to: Dr. Max Costa, Department of Environmental Health Sciences, Lanza Laboratories, Long Meadow Road, Tuxedo, NY 10987. An Equal Opportunity Employer, M/F.

Applications are invited for a tenure-track position at the ASSISTANT PROFESSOR or tenure-track ASOCIATE PROFESSOR level. Applicants should have an M.D., Ph.D., or equivalent. The goal of the search is to identify candidates who are trained to elucidate at the cellular and molecular levels the mechanisms by which environmental agents, inherited genetic factors, or biochemical deficits interact to cause neurodegenerative disorders in human and experimental systems. The position is supported, in part, by the Burroughs Wellcome Award and the Environmental Health Sciences Center and either the Department of Neurology or Pharmacology.

Applicants should send curriculum vitae, summary of research interest, and names of three references. Deadline for receipt of applications is 1 May 1991.

Applications should be sent to: M. D. Mais University of Rochester Biophysics and Environmental Health Sciences Center Rochester, NY 14623

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

THE UNIVERSITY OF CALGARY
MOLECULAR BIOLOGIST

The University of Calgary Joint Injury and Diseases Research Group invites applications for a full-time academic position as a molecular biologist at the ASSOCIATE PROFESSOR level or higher. Qualifications include a Ph.D., a strong record of publications and support, and interest and training in the areas of molecular biology of extracellular matrix components, growth factors, connective tissue growth and repair or inflammation. The joint injury and diseases research group is a multidisciplinary research unit comprised of molecular and cell biologists, immunologists, rheumatologists, orthopedic surgeons, and bioengineers.

The selected candidate must compete successfully for salary and establishment grant support from the Alberta Heritage Foundation for Medical Research, the Canadian Arthritis Society, and the Medical Research Council of Canada, and will have 75% of time protected for research. In accordance with Canadian immigration requirements, preference will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Policy and encourages applications from all qualified candidates, including women, visible minorities, and people with disabilities.

Please submit applications, including curriculum vitae and the names of three references, by 30 June 1991 to:

Joint Injury and Diseases Research Group The University of Calgary 2440 Faculty Drive, N.W., P.O. Box 2163, Calgary, Alberta Canada T2N 4N1

Assistant or Associate Professor: Immunology. The Department of Pathology and Laboratory Medicine at Boston University School of Medicine invites applications for a faculty position to begin September 1991. Applicants should have a strong, ongoing research program in cellular or molecular immunology, independent research support, and significant teaching experience. Send curriculum vitae, statement of research interests, and names of three references to: Dr. Robert C. McKnight, Professor, Chairman, Department of Pathology and Laboratory Medicine, Boston University School of Medicine, K707, 80 East Concord Street, Boston, MA 02118.

Assistant or Associate Professor, Department of Biology, Metropolitan State College

Applications are invited for a tenure-track faculty position effective August 1991. Qualifications: Earned doctorate with an emphasis in microbial genetics. Must have the training to teach general microbiology, virology, microbial genetics, general genetics, introduction to general biology (for science majors), and human biology for nonmajors (within the General Studies Program). Interested applicants should send a letter stating their expected availability date by 1991 to: Dr. Anne Dinmore, Department of Biology, Metropolitan State College of Denver, Campus Box 53, P.O. Box 173632, Denver, CO 80217-3362.

Metropolitan State College of Denver is an Equal Opportunity Employer. Applications from minorities and women are particularly invited.

New Mexico Highlands University is accepting applications for the position of: ASSOCIATE PROFESSOR, ENVIRONMENTAL SCIENCE. New Mexico Highlands University announces an opening for a non-tenure-track position to develop a curriculum for an environmental restoration and waste management program. Other responsibilities include instruction of related course per term, preparation of grant proposals to enhance the program, and participation in the outreach component of the program. The position is a 12-month, 4-credit hour position funded by DOE. The position is available immediately. Closing date: 15 March 1991 or until filled. Submit letter of application, résumé, official transcripts, and three letters of reference to: Environmental Science Search Committee, School of Science and Technology, New Mexico Highlands University, Las Vegas, NM 87701. New Mexico Highlands University is a small, state-supported university and is an Equal Opportunity/Affirmative Action Employer.

PLANT GENOME DATABASE PROJECT

The University of Maryland at College Park in cooperation with the National Agricultural Library (NAL) of the U.S. Department of Agriculture (USDA) in accordance with the Plant Genome Initiative is seeking a DATABASE MANAGER to provide systems analysis and expertise needed to accomplish the objectives of the Plant Genome Data and Information Center (PGDC) at the NAL. Recruitsts and implements appropriate hardware and software systems needed to accomplish objectives of the project. The successful candidate will have a Ph.D. from USDA--NAL Office of Plant Genome Research, and the clientele of research scientists in the public and private sectors to whom the PGDC is directed. Applicants should have a Ph.D. in biological or computer science, 3 years of experience, and demonstrated ability to manage multiuser computer-based information systems and to design and implement databases of research information. Salary: $44,000 minimum commensurate with experience. Deadline for applications: 15 March 1991. Send curriculum vitae and three letters of reference to: Dr. Paul J. Bottino, Department of Botany, University of Maryland, College Park, MD 20742-7701. An Equal Opportunity/Affirmative Action Employer.

Assistant/Associate Professor of Biocomputing. Evidence of research strength expected in mathematical biology, either in areas of relevant mathematical theory or biological applications. Applicants should be faculty in math or grad student. Send curriculum vitae, letter of application, curriculum vitae, and three letters of reference. Deadline 15 March 1991. Send to: Dr. John W. Danna, Department of Mathematics, Virginia Polytechnic Institute and State University, P.O. Box 0430, Blacksburg, VA 24061.

Asst. Professor of Biostatistics. Apply by 15 March 1991. Send curriculum vitae, letter of application, references, and transcripts to: Dr. Robert J. Swihart, Department of Mathematics, Graduate Program, North Carolina State University, Campus Box 8205, Raleigh, NC 27695-8203. Equal Opportunity/Affirmative Action Employer.

ASSOCIATE/ASSOCIATE PROFESSOR: LANDSCAPE ECOLOGY

The Department of Animal Ecology at Iowa State University seeks applicants to fill a 9-month, tenure-track position. A Ph.D. in ecology or related discipline, strong quantitative skills, and familiarity with geographic information systems are required. The successful applicant is expected to conduct research in landscape-level problems in agroecosystems and to teach graduate and undergraduate courses in landscape ecology or related areas. Send curriculum vitae, college transcripts, three reference letters, and a statement of career plans by 15 March 1991 to: James Dinmore, Department of Animal Ecology, Iowa State University, Ames, IA 50011. Telephone: 319/231-5115. Fax: 319/231-5174.

FULL PROFESSOR of psychiatry and/or psychol ogy and DIRECTOR of Human Development and Social Ecology in the new Civitas, National Research University of Atlanta at Atlanta, (UA) at the level of the Chair Professor. Distinguished record of productivity and funded longitudinal research; experience in pre- and postdoctoral training. Send curriculum vitae and three references to: John D. Crissman, M.D., Department of Pathology, 9374 Scott Hall, Wayne State University School of Medicine, 540 East John R., Detroit, MI 48201. An Equal Opportunity/Affirmative Action/Equal Opportunity Employer. Submit applications to: Dr. Craig and Sharon Ramey, Civitan Interna tional Research Centre, P.O. Box 113, UAB Station, Birmingham, AL 35294. Closing date is 15 March 1991.

SENIOR CANCER SCIENTIST

The Department of Pathology at Wayne State University invites applicants to lead a research group in cancer biology. The individual will be responsible for a new research program including recruitment of additional faculty. Ph.D. and/or M.D. scientists are invited to apply. The position will be responsible for developing a multifaceted research and teaching program in cancer biology. Send curriculum vitae and three references to: John D. Crissman, M.D., Department of Pathology, 9374 Scott Hall, Wayne State University School of Medicine, 540 East John R., Detroit, MI 48201. An Equal Opportunity/Affirmative Action Employer, M/F.

PROJECT LEADER

We are seeking a project leader to coordinate and participate in a research program in terrestrial ecological risk assessment including studies of pesticide exposure and effects on birds and small mammals in both laboratory and field settings. Research will be done both in-house and through cooperating institutions, for at least 2 years, and will include a state-of-the-art terrokom facility located nearby. Apply if you have at least 5 to 6 years of experience in wildlife toxicology or small mammal population ecology as evidenced by a publication record and a demonstration of capabilities in designing large-scale field studies. Potential hiring mechanisms include interagency agreements for federal or state employees (including state universities) or cooperative agreements with other institutions. Send curriculum vitae, and the names of two references by 20 March 1991 to: Dr. Anne Fairbrother, USEPA, Environmental Research Laboratory, 1284 S. 35th Street, Corvallis, OR 97333.

Kentucky State University, Community Research Serv ice, invites applications for the position of CO-INVE STIGATOR in environmental toxicology/water quality project. Responsibilities include design, implementation and interpretation of agricultural chemicals dissipation, analytical chemistry, computer usage, experimental design, and statistical skills desired. Qualifications: Ph.D. or M.S. required. Send inquiries to: Dr. J. D. Fairbrother, Community Research Service, Kentucky State University, Frankfort, KY 40601. Telephone: 802-227-6865. Send resumes, transcripts, three letters of reference, and selected reprints. Equal Opportunity/Affirmative Action Employer.
GEO-CENTERS, INC.'s Biomedical R&D Division has immediate openings for technical staff positions in support of our R&D activities in Bethesda, MD. Applicants will be evaluated on their educational background and practical experience. Senior level applicants require a solid publication record in the appropriate field.

**Product Development Manager - Code 2198** Primary responsibilities for this position will include the development of novel immunodiagnostic products, and immuno-based sensors. The successful candidate will possess an MD or PhD in Immunology or a related field, with a minimum of 10 years' demonstrated product development experience and an in-depth knowledge of fiber optic technologies. Candidates should also have previous experience in new venture start-ups, with commensurate technical, personnel, and financial management skills. Applicants should be familiar with FDA regulations and approval processes. Prior experience in Government-funded research for NIH, DoD, or EPA will be considered a definite plus.

**Microbiologist/Immunologist - Code 2186** A postdoctoral level candidate is sought to conduct investigations involving the isolation and characterization of stem cells from HIV seropositive subjects. The ideal candidate will possess a PhD in Microbiology or Immunology, and will have a minimum of 2 years' demonstrated practical experience in culturing cells infected with infectious agents. Previous experience with HIV infected samples and P2 level facilities also required. Additionally, candidates will be evaluated on oral and written communication skills.

**Immunology Technicians - Code 2187** Support staff members are sought to assist our senior research staff in research activities relating to cell culture and analysis of HIV infected cell lines. Candidates should possess a BS/MS in Microbiology or Immunology, and a minimum of 2 years' practical experience with HIV infected cell lines.

**Biochemistry Technicians - Code 2188** Support staff members are sought to assist our senior research staff in the preparation of gels, blots, etc. Candidates should possess a BS in Biochemistry or a related field, and will require a minimum of 2 years' demonstrated practical laboratory skills.

**Inhalation Toxicologist - Code 2199** We anticipate the need for a senior level Inhalation Toxicologist. Applicants should possess a PhD in Toxicology, with 2 years' postdoctoral experience. The successful candidate will have demonstrated laboratory skills, along with substantial computer modeling capabilities, as well as extensive experience with prolonged low-level exposures.

**Cell Biologist/Immunologist - Code 2200** A postdoctoral level candidate is sought to evaluate novel biomaterials during angiogenic events of wound repair. Applicants should possess a PhD in Cell Biology or Immunology, with extensive experience with cytokines, as well as in-vitro and in-vivo models. The candidate should also possess expertise in the isolation and culture of endothelial cells, as well as knowledge of slow release systems.

**Industrial Hygienist - Code 2201: San Diego, CA** A senior staff level candidate is sought to conduct research focusing on industrial hygiene and hazardous material control. The candidate will be involved in the development of models which will be utilized by various personnel for decision support. The successful candidate will possess a PhD in Industrial Hygiene, and will be required to have minimum 2 years' demonstrated practical experience in epidemiologic investigations and statistical analysis. Demonstrated computer skills will also be required.

**Research Physiologist - Code 2202: San Diego, CA** A senior staff level candidate is sought to conduct research on human performance in various work, environmental and other stressors. This position involves the identification of the physical, mental, behavioral, and man-machine interface requirements for successful performance during sustained military operations. The successful candidate will possess hands-on experience in the assessment of human performance when subjected to various stressors, and the development and evaluation of effective performance degradation countermeasures.

U.S. CITIZENSHIP OR GREEN CARD REQUIRED. We offer a competitive salary and attractive benefits. Applicants are encouraged to send their resumes to: GEO-CENTERS, INC., 10903 Indian Head Highway, Fort Washington, MD 20744; Attn: Deborah Hall-Greene, Human Resources Manager/Code 50.

GEO-CENTERS, INC., is an Equal Opportunity/Affirmative Action Employer. (Principals Only.)
TENURE-TRACK

FACULTY POSITION IN
VISION RESEARCH

Applications and nominations are invited for a tenure-track faculty appointment in the Eye Research Institute of Oakland University. The position is open for research in biochemistry, molecular biology or immunology of ocular tissues, relating to gene expression, signal transduction, membrane function and metabolic regulation. Candidates should have a strong record of published research and grant support and should be able to establish a vigorous independent program in visual science. The level of appointment will be commensurate with the applicant's experience; salary is negotiable, with excellent fringe benefits.

The faculty of the Eye Research Institute engages in full-time research in biochemistry, physiology and molecular biology of the cornea, lens, retina and intraocular fluids, offering good opportunities for collaboration. The institute also has an NIH Core facility in electron microscopy and tissue culture and conducts clinical research with the faculty of the affiliated department of Ophthalmology of William Beaumont Hospital.

The Eye Research Institute is an independent academic unit of Oakland University, a state supported institution situated on a 1400 acre campus, 25 miles north of Detroit, with an enrollment of 12,300 students in baccalaureate and doctoral programs.

Applicants should send a curriculum vitae, 3 to 5 reprints and the names of three references by April 12, 1991 to Dr. M. V. Riley, Chair, Search Committee, Eye Research Institute, Oakland University, Rochester, Michigan 48036-4401.

Equal Opportunity Affirmative Action Employer

VACANCY

DEAN

University of Oklahoma College of Medicine – Tulsa

The University of Oklahoma College of Medicine – Tulsa is a branch campus of the University of Oklahoma College of Medicine. Approximately one fourth of the third and fourth year students are assigned to Tulsa, and there are six independently accredited residencies. The Dean is the principal academic and administrative officer of the Campus and reports to the Executive Dean of the College of Medicine. Specifically, the Dean is responsible for maintaining a quality educational experience for students and residents, for stimulating scholarship within the faculty, overseeing the patient care activities of the faculty, and maintaining an efficient and effective administrative structure, all within the policies and procedures of the College of Medicine and the University.

The holder of this position should have an M.D. degree and be qualified for a senior faculty position in one of the academic departments, have an established record of academic and administrative competence, and be willing to work in and with professional and civic groups.

Nominations and applications should be sent to Robert W. Block, M.D., Chairman, Dean's Search Committee, University of Oklahoma College of Medicine – Tulsa, 2008 S. Sheridan Road, Tulsa, Oklahoma 74129.

The University of Oklahoma is an equal opportunity employer.

SIMON FRASER UNIVERSITY

DEPARTMENT OF BIOLOGICAL SCIENCES

ENDOWED CHAIR IN ENVIRONMENTAL SCIENCE

Applications and nominations are sought for an Endowed Chair in Environmental Science within the Department of Biological Sciences at Simon Fraser University.

The successful candidate for this senior faculty position is expected to be a leading researcher in environmental science and to have a proven ability to lead a strong research team that would integrate with other strengths in the department such as environmental toxicology. The individual will be expected to participate in teaching and to assist in the promotion and development of a programme in Environmental Science.

Applications should be forwarded by 1 May, 1991 to:

Dr. B.A. McKewon, Chairman
Department of Biological Sciences
Simon Fraser University
Burnaby, B.C., V5A 1S6.

Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants. This advertisement is directed to applicants who at the time of application are eligible for employment in Canada.

BIOLOGY FACULTY

Geisinger Clinic

POSTDOCTORAL POSITION

Position available immediately to study the expression and function of structurally distinct \( \beta \) and \( \gamma \) subunits of the signal transducing G proteins. Qualified candidates for this position will receive a highly competitive stipend with excellent benefits, and the opportunity to develop their own research ideas, working in a well-equipped facility in a rural environment. Some familiarity with expression of recombinant protein and protein purification is desirable, but not required. Send curriculum vitae and names of three references to Dr. Janet D. Podobeshaw, Weis Center for Research, Geisinger Clinic, Danville, PA 17822. Equal Opportunity Employer M/F/H/V.

Geisinger

Geisinger Clinic

TOXICOLOGISTS

ITR Research Institute, a leading R & D organization, continues to experience growth in its Life Sciences Department and is seeking PhD Scientists in the following disciplines:

- Neurotoxicology
- Regulatory Toxicology/ Pharmacokinetics
- Inhalation Toxicology

We offer a competitive benefits package as well as opportunities for professional growth. For immediate consideration, please send curriculum vitae in confidence to: Ms. Lucy Amft, Professional Staffing, ITR RESEARCH INSTITUTE, 10 W. 35th Street, Chicago, IL 60616. Equal Opportunity/ Affirmative Action Employer.

Salem State College

SALEM STATE COLLEGE IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER. PERSONS OF COLOR, WOMEN AND PERSONS WITH DISABILITIES ARE PARTICULARLY ENCOURAGED TO APPLY.

Salem State College
RESEARCH OPPORTUNITIES

at the Shriners Burns Institute and the Massachusetts General Hospital/Harvard Medical School. Applications are invited from outstanding individuals for Senior Research Scientist and Postdoctoral positions in the following areas:

- Ultrastructural Cytology, Cytchemistry, Immunoelectron Microscopy
- NMR, GC-MS, and Bioseparations
- Tissue Remodeling and Wound Healing
- Materials Science and Engineering
- Polymer Science
- Eukaryotic and Prokaryotic Molecular Cell Biology
- Computational Chemistry and Molecular Modeling
- Pneumocyte Molecular Cell Biology
- Extracorporeal Therapies
- Cytokines and Monokines

Candidate requirements: MD and/or Ph.D. in an appropriate field with demonstrated ability to carry out creative independent research in one's area of expertise. Senior Scientist salaries range from $50-72,000/year; Postdoctoral positions $25-36,000/year. Interested candidates should submit an extended CV which clearly documents their qualifications and professional accomplishments and three letters of recommendation to:

Dr. Ronald G. Tompkins
Chief of Staff
Shriners Burns Institute
51 Blossom Street
Boston, MA 02114

Women and minorities are encouraged to apply.

PhD TOXICOLOGIST

SENIOR RESEARCH SCIENTIST

BRISTOL-MYERS SQUIBB COMPANY

You'll head a team responsible for acute, subacute, dose range-finding, and certain chronic toxicity studies, including protocol design, conducting, interpreting and reporting research results. Requires a PhD in toxicology, Pharmacology, or other Biological Science plus at least three years of Toxicology experience in a pharmaceutical company or contract laboratory serving the pharmaceutical industry.

We're a world-wide leader in pharmaceutical research and have a strong heritage of innovation and accomplishment. Our operating style encourages personal creativity, contribution, and professionalism. This unit of Bristol-Myers Squibb is located in Evansville, Indiana, a community of beautiful residential areas, exceptional recreation, education and cultural facilities. We offer excellent salaries, superb benefits, paid relocation, and real growth opportunities.

Send resume, including salary expectation, in confidence to:

Research Recruitment Box 6L52, B109
Pharmaceutical Research Institute
Bristol-Myers Squibb
2400 W. Lloyd Expressway
Evansville, IN 47721-0001

We are an Equal Opportunity Employer M/F/H/V

BROOKHAVEN NATIONAL LABORATORY

Plant Scientist

The Biology Department at Brookhaven National Laboratory seeks to appoint a junior level staff scientist who will develop an innovative, independent research program to study important problems in development, regulation or molecular genetics of higher plants, or the structure of macromolecules important to plant form or function.

Applicants with demonstrated creative research ability are sought. The proposed research program should complement current programs in molecular and cellular biology, plant molecular genetics, bioenergetics and structural biology. There is good potential for collaborations.

Brookhaven offers a unique combination of facilities for structural biology, including stations at the National Synchrotron Light Source for x-ray crystallography, low angle scattering and UV spectroscopy; stations at the High Flux Beam Reactor for neutron crystallography and low angle scattering; and a Scanning Transmission Electron Microscope capable of measuring the mass of individual molecules and particles.

Applicants having a Ph.D. or equivalent degree and relevant postdoctoral training should submit a curriculum vitae, the names of at least three professional references, and a statement of research goals to: Search Committee, Biology Department, Building 463, Brookhaven National Laboratory, Associated Universities, Inc., Upton, L.I., NY 11973. Equal opportunity employer M/F.
SIMON FRASER UNIVERSITY
THE SHRUM CHAIR IN SCIENCE

Applications are invited for the Shrump Chair in the Faculty of Science at Simon Fraser University. This endowed chair is held in the Department of M.D., Chair, Search Committee for Department of Pharmacology Chairperson, c/o Susan Hilary, Dean's Office, School of Medicine, 5-222, University of California, SAN FRANCISCO 94143-1000. UC San Francisco is an Affirmative Action/Equal Opportunity Employer. Women and minorities are urged to apply.

DEAN OF BIOLOGICAL SCIENCES
Brown University invites nominations and applications for the position of dean of biological sciences. Applications are expected to have a record of significant research achievement and administrative and teaching experience. The dean, who carries the title of Frank L. Day Professor of Biology, has authority over and responsibility for academic and administrative affairs pertaining to faculty in the Program in Biology and certain components of the Program in Medicine. He/she also participates in many activities extending between biological and medical sciences, and between the campus-based and hospital-based research faculties.

The successful candidate will have a tenure-track faculty, 90 graduate students, and 220 undergraduate concentrators. Opportunities exist for collaboration with several other departments.

Applicants should submit a résumé describing research, teaching, and administrative experience and professional priorities, a list of publications, representative reprints, and names and addresses of five referees. Applications should be sent to: Chair of the Search Committee, Professor D. H. Morse, Division of Biology and Medicine, Box G-A101, Brown University, Providence, RI 02912. Screening of applications will begin on 1 April 1991 and continue until a successful candidate has been identified or the search is closed. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION
ENVIRONMENTAL TOXICOLOGY

The Department of Environmental Health Sciences at the School of Public Health, University of Alabama at Birmingham (UAB), is seeking an ASSISTANT PROFESSOR in toxicology. This is a tenure-track position with responsibilities that include teaching of graduate level toxicology courses and initiation of externally funded independent and collaborative research. The department seeks individuals who can work within the University with an interest in molecular biology as applied to toxicology or neurotoxicology and who can link to the department's research interests. Highlights of qualifications and responsibilities include:

- A Ph.D. in toxicology or a related field
- A strong background in toxicology and/or molecular biology
- Ability to teach courses in toxicology
- Research interests in toxicology, molecular biology, and environmental health sciences

The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION
DEVELOPMENTAL BIOLOGY

Applications are being accepted for TENURE-TRACK POSITIONS in the discipline of anatomy. Available 1 July 1991. Applicants should possess a Ph.D. degree in anatomy and the ability to teach gross anatomy and assist in the neuroanatomy and/or histology laboratories. Salary is competitive and commensurate with experience. The college actively seeks applications from women and minorities for these positions. Send curriculum vitae, letters of recommendation, and a brief statement of research interests to: Dr. Gayle H. Nelson, Chairman, Anatomy Search Committee, College of Osteopathic Medicine of the Pacific, 309 East College Plaza, Pomona, CA 91766-1889.

DEVELOPMENTAL BIOLOGY

Sabbatical re-...
U.S. Army Medical Research Institute of Infectious Diseases
Fort Detrick, Frederick, Maryland

SCIENTISTS—BIOMEDICAL RESEARCH

Numerous staff scientist positions exist at the U.S. Army Medical Research Institute of Infectious Diseases, Department of the Army. These openings are competitive Federal Civil Service positions and applicants must be U.S. citizens.

The Institute, which has excellent facilities, is a leading medical research facility engaged in the development of drugs and vaccines against militarily important diseases. All research is unclassified and publication is encouraged. The Institute is located in Frederick, MD in a semi-rural setting with ready access to the metropolitan areas of Washington, D.C. and Baltimore, MD.

Salary Range (effective 1 Jan 91):

GS-12 — $37,294 thru $48,481
GS-13 — $44,348 thru $57,650
GS-14 — $52,406 thru $65,994 (step 5)

(1) RESEARCH CHEMIST (GS-13/14): Selectee will be part of a multidisciplinary team studying bacterial diseases. Research involves the biochemical characterization of bacterial virulence factors including toxins and their mechanism of action. Experience in protein chemistry and purification required. Areas of study include analysis of protein structure/function relationships and the mechanisms of toxin action at a cellular and molecular level.

(2) IMMUNOLOGIST (GS-12/13): Selectee will be a part of a multidisciplinary team studying the immunology and pathogenesis of bacterial disease and toxins. Research involves measuring the cellular and humoral immune response to infections and vaccines, determination of in vitro correlates of immunity, study of antigen processing, adjuvants and other means of enhancing an effective immune response.

(3) MICROBIOLOGIST (GS-12/13): Selectee will participate in the development of rapid diagnostic tests for use on toxins, and viral, rickettsial and bacterial human pathogens. Program emphasis is on development of diagnostic tests which are simple and rapid to perform and utilize measurement of specific antigen, IgM antibodies, or nucleic acids. Candidates may have background in microbiology, molecular biology, biochemistry or related fields. Experience in diagnostic test development is desirable.

(4) MICROBIOLOGIST/IMMUNOLOGIST (GS-12/13): Expertise and interest in the study of microbial toxins. Research will involve (a) the development of protective vaccines against toxins, (b) the development of immunological-based identification systems for toxins, and (c) studies on the mechanisms of action of microbial toxins. Background and experience with protein purification and chemistry and experience with anaerobic bacteria would be positive factors.

(5) MOLECULAR VIROLOGIST (GS-12/13): Selectee must have research interests in virology and molecular biology as they apply to the development of antiviral drugs. Research directions may include basic studies on mechanism of drug actions and on design of assays for and approaches to the interruption of specific, functional viral processes, such as proteolytic enzymes or replicases. A close working relationship is expected with scientists in the institute involved in antiviral drug development as well as with extramural contractors. Candidates should hold a Ph.D. and/or M.D. and should have experience and publications in virology, molecular biology, and research on antiviral drugs.

(6) MOLECULAR VIROLOGIST (GS-13): Selectee must have a research interest in modern molecular virology and the development of virus vaccines. Research involves the cloning and expression of virus genes coding for antigenic determinants important for the induction of immunological protection from disease. Basic investigations employing recombinant DNA technology designed to improve vaccines and vaccination strategies represent a major component of the position. Collaborations include vaccine development scientists and basic researchers within the Institute as well as extramural contractors involved with vaccine production. Candidates should hold a Ph.D. and/or M.D and should have research experience and publications in virology, molecular biology, and/or immunology.

(7) IMMUNOLOGIST (GS-13): Selectee must have a strong research interest in human vaccine development and experience in evaluating the immune response to viral immunogens. Development of animal models and a detailed exploration of both humoral and cellular immune responses to experimental candidate vaccines are important elements of the position. Collaborations are expected with molecular virologists and basic researchers in the vaccine development group as well as with medical personnel involved in testing and evaluation of vaccine candidates in human volunteers. Candidates should hold a Ph.D. and/or M.D. and should have research experience and publications in virology, molecular biology, and/or immunology.

(8) MOLECULAR GENETICIST (GS-12/13): Selectee must have experience in molecular genetics especially as applied to immunology. Research involves isolation and analysis of genes responsible for commitment of cells to respiratory mucosal immunity and/or development of mucosal vaccines and vectors. Collaboration within or outside the Institute is encouraged.

(9) RESEARCH CHEMIST (GS-12): Selectee will be a part of a team managing the chemical and biological data for an antiviral drug discovery research program. Research involves the acquisition, identification, and development of potential compounds. Drug discovery is supported by the analysis of structure/activity relationships based on chemical structure, data generated in vitro and in animal model systems, and design and implementation of computer systems for the retrieval of relevant data. Candidates should hold an M.S. degree or equivalent and experience in the design and principles of computer systems associated with integrated chemical and biological databases for the analysis of structure/activity relationships to support drug development.

(10) MICROBIOLOGIST (GS-12/13): Selectee will be a part of a group studying the role of cytokines in inflammation, infection, and shock. Emphasis will be on identifying new areas with potential for therapeutic intervention. Work will include both in vitro and in vivo (animal modeling) programs. Close collaboration with a clinical research unit is expected.

(11) IMMUNOLOGIST (GS-12/13): Selectee will be a part of a multidisciplinary team studying immunity to protein toxins. Research emphasizes the fields of cellular immunity, protein chemistry and antigen processing. Goal is the development of new vaccines against protein toxins. Studies include the definition of toxin epitopes and basic research into the immune response against proteins.

Application procedures: Candidates should specify position(s) for which they are applying and submit an Application for Federal Employment (SF 171) and/or a Curriculum Vitae. Completed applications should be mailed to:

Mr. Raymond J. Mangold
Directorate of Civilian Personnel
Fort Detrick, Frederick, MD 21702–5000
Telephone: (301) 663-2007

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Lecturer

Introductory Biology Laboratories

Department of Biology

The University of Michigan

The Department of Biology at the University of Michigan announces the availability of a non-tenure-track lecturer position. The term of appointment is for a period of 3 years and is subject to renewal based on the evaluation of performance and continuing needs. The lecturer will serve as coordinator and supervisor of instruction in introductory laboratory courses in biology. A relevant Ph.D. degree is required, along with experience in teaching undergraduate courses in biology. In addition to general supervisory matters, duties will include working with faculty to update laboratory experiments and training of graduate and undergraduate teaching assistants who serve in the laboratories. Appointments are on a 12-months basis and include a liberal benefits package. This position is available September 1, 1991, and the deadline for receipt of applications is 1 April 1991. Applicants should provide curriculum vitae and three letters of recommendation to:

Dr. B. A. Hazlett

Department of Biology

The University of Michigan

Ann Arbor, MI 48109-1048

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

Biology. Three Faculty Positions

Applications are invited for three positions (two assistant professors; one instructor) beginning August 1991. (Ph.D. required for assistant professor positions.) (i) General biologist (physiology concentration) to teach in the freshman program, (ii) General biologist to teach general biology lecture course, (iii) General biologist to teach general biology laboratory course. Ability and willingness to teach freshman biology is required of all candidates. Xavier University is a small predominantly African-American, Catholic, liberal arts institution. Application deadline: 1 March 1991 or until filled. Send resume and three letters of recommendation to: Willie J. Caffey, Jr., Chairman, Search Committee, Biology Department, Xavier University, Box 858, New Orleans, LA 70125.

Drug Delivery Faculty Position

A full-time, tenure-earning faculty position is available at the University of Nebraska College of Pharmacy for a faculty member who will provide expertise in physiopharmacological approaches to targeted and controlled drug delivery. Physiopharmacological approaches are broadly defined but not limited to the areas of pharmacokinetics/biopharmaceutics, physical chemistry, polymer chemistry, pharmaceutical chemistry, and chemical engineering. Applicants with an earned doctorate and established research and funding record are sought. Send curriculum vitae and names of references to: Position #0-6148, Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center, Omaha, NE 68198-6025. The University of Nebraska has an Affirmative Action/Equal Opportunity Employer.

Lecturer

Introductory Biology Laboratories

Department of Biology

The University of Michigan

The Department of Biology at the University of Michigan announces the availability of a non-tenure-track lecturer position. The term of appointment is for a period of 3 years and is subject to renewal based on the evaluation of performance and continuing needs. The lecturer will serve as coordinator and supervisor of instruction in introductory laboratory courses in biology. A relevant Ph.D. degree is required, along with experience in teaching undergraduate courses in biology. In addition to general supervisory matters, duties will include working with faculty to update laboratory experiments and training of graduate and undergraduate teaching assistants who serve in the laboratories. Appointments are on a 12-months basis and include a liberal benefits package. This position is available September 1, 1991, and the deadline for receipt of applications is 1 April 1991. Applicants should provide curriculum vitae and three letters of recommendation to:

Dr. B. A. Hazlett

Department of Biology

The University of Michigan

Ann Arbor, MI 48109-1048

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

Neuroscience

Harvard Medical School

Massachusetts General Hospital

Several faculty positions are available in the Department of Neurobiology at Harvard Medical School and also in the Neuroscience Center at the Massachusetts General Hospital (MGH). We are interested in a wide range of subjects ranging from molecular mechanisms of neuronal transmission to higher integrative functions. At the MGH Center, special consideration will be given to individuals whose work has direct bearing on human neurological and psychiatric disease. All successful candidates will be expected to participate fully in the Harvard neuroscience community and become involved in training medical students, graduate students, and postdoctoral fellows. Applicants should submit their curriculum vitae, a brief statement of current research (including reprints, if available), and the names of three referees who might write on their behalf to: Gerald D. Flachbach, Chairman, Neurosciences Search Committee, Harvard Medical School, 320 Longwood Avenue, Building B2, Room 420, Boston, MA 02115. Women and minority candidates are encouraged to apply. Harvard Medical School and the Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers.

Faculty Position in Biochemistry

Applications and nominations are invited for a tenure-track faculty position in the Department of Biochemistry, Purdue University. We are particularly interested in individuals trained in molecular biological approaches to plant research problems. Candidates must have postdoctoral training, a strong research record, and be capable of developing and continuing a vigorous research program. The individual selected for this position will participate in the instructional program of the department which encompasses undergraduate, graduate, and medical curricula.

Curriculum vitae, names and addresses of three individuals who can supply letters of reference, and a two-page summary of research interests are required for an application. The screening of applications will continue until the position is filled.

Plant Molecular Biology Search Committee

Department of Biochemistry

West Lafayette, IN 47907-1153

Purdue University is an Affirmative Action/Equal Opportunity Employer.

Signal Transduction

Department of Behavioral Neuroscience

Applications are invited to fill a new TENURE-TRACK POSITION available 1 September 1991. The appointee will be expected to develop and maintain a funded research program focusing on the analysis of signal transduction mechanisms and their effect on cell physiology. Collaborative research efforts are widespread in the department and the large neuroscience community in the university and are strongly encouraged. Some teaching at both the graduate and undergraduate level is expected. Applicants should have a Ph.D. or M.D. and some postdoctoral experience. Applicants should send curriculum vitae, a one-page statement of research goals, three representative publications, and have three letters of recommendation sent to:

Faculty Search Committee

Department of Behavioral Neuroscience

University of Pittsburgh

Pittsburgh, PA 15260

All materials must be received by 15 March 1991. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

Faculty Position in Immunology

A faculty appointment is to be available in the recently expanded Department of Immunology at St. Jude Children's Research Hospital from May 1991, coincident with the move of basic sciences into a new research building. This is a full-time research position, which can be held at any academic level. Applications from both new and established investigators are welcome. The department currently has strong programs in molecular and cellular immunology, host-parasite interactions, and specific interests in T lymphocyte ontogeny and effector function, genetic immunodeficiencies, the regulation of gene expression, macrophage/T cell interactions, mechanisms of tolerance, and viral immunity. A new faculty member might either establish an independent effort complementing one of these existing areas, or provide a completely new focus. Major research groups in other departments at St. Jude Children's Hospital are concentrating on: growth regulation and signal transduction in hematopoietic cells, human bone marrow transplantation, cancer chemotherapy, respiratory pathogens, and Epstein Barr virus. The research environment is highly interactive, and collaboration is encouraged.

Enquiries should be directed to: Dr. Peter C. Doherty, Chairman, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer. We provide a smoke-free environment.

Postdoctoral Position

Participate in study of surface proteins of C. albicans; structure, expression, and regulation with morphogenesis and function in host-parasite interactions. Experience with fungi, monoclonal antibodies, or molecular techniques desirable. Anticipated availability: April 1991. Send curriculum vitae and names of three references to: Dr. W. L. Chaffin, Department of Microbiology, Texas Tech University Health Sciences Center, Lubbock, TX 79430.

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ANTICIPATED FACULTY POSITIONS  
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During 1991–1992 the Cancer Center of the Medical College of Wisconsin in Milwaukee anticipates adding new faculty to the following research programs:  

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Biological Response Modifiers:  
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Appointments will be for established investigators at senior levels of achievement and will include appointments in the appropriate medical school department.  

Deadline for applications June 1, 1991.  

Individuals interested should send a curriculum vitae to:  

Ernest C. Borden, M.D.  
Director  
Cancer Center of Medical College of Wisconsin  
8701 Watertown Plank Road  
Milwaukee, WI 53226  

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Working out of our totally modern, 2500 square foot Cellular and Genetic Toxicology Unit, you will design, conduct, monitor and evaluate in vitro and in vivo genotoxicity studies conducted at the Lafayette, New Jersey site and at contract laboratories. This will involve supervision of three experienced full-time employees, as well as close interaction with toxicology staff, management and regulatory agencies to support registration of new drugs.  

You should be skilled in the conduct/interpretation of all in vitro cytotoxicity/genotoxicity studies and in vivo genotoxicity studies employed in drug risk assessment. Requires 2-5 years in genetic toxicology, a PhD in a biological science, and familiarity with GLP procedures and regulatory issues. In addition, an interest in in vitro toxicology and immunotoxicology would be desirable.  

We offer a competitive salary, outstanding benefits, and an attractive semi-rural living environment. Please send resume to: Mr. W. Decker, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.  

What you have in mind, we put into action.
FACULTY POSITIONS: BIOCHEMISTRY, MICROBIOLOGY, AND MOLECULAR BIOLOGY

The Department of Biochemistry, Microbiology, and Molecular Biology at the University of Maine invites applications for two ASSISTANT PROFESSOR, tenure-track positions. Applicants will be expected to teach a general-level undergraduate course in biochemistry or microbiology and a graduate-level course in their field of expertise, establish an externally funded research program, and advise graduate students. Applications should have a Ph.D. and postdoctoral experience.

- **BIOCHEMISTRY** position: Preference will be given to applicants using molecular approaches with prokaryotes in areas including but not limited to nitrogen metabolism, photosynthesis, cell signaling, or plant-bacterial interactions.

Applicants should send curriculum vitae, description of research interests, and three letters of reference to: Dr. Bruce L. Nicholson, Chair, Department of Biochemistry, Microbiology, and Molecular Biology, University of Maine, Orono, ME 04469. Consideration of applications will begin 1 March 1991. The University of Maine is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITIONS

- **UNIVERSITY OF MARYLAND**

Available immediately to study the regulation of human neuroblastoma cell growth, differentiation, and metastasis, focusing on the regulation of expression of the amplified N-myc oncogene. Experience in molecular techniques is essential. Send curriculum vitae and three names of references to: Christopher N. Frantz, M.D., Director, Division of Hematology/Oncology, Department of Pediatrics, University of Maryland, Box 123, 22 South Greene Street, Baltimore, MD 21201. The University of Maryland is an Affirmative Action/Equal Opportunity Employer.

- **POSTDOCTORAL POSITIONS**

Available immediately for Ph.D. or M.D. in immunology and molecular biology. Research will involve studies on cellular signals and mechanisms of human B cell differentiation. This area includes (i) biochemical purification and molecular cloning of various factors and (ii) regulation of lymphokine gene expression. Salary is negotiable. An Equal Opportunity Employer. The interested candidate is encouraged to send curriculum vitae to: Dr. Y. S. Choi, Director, Laboratory of Cellular Immunology, Alton Ochsner Medical Foundation, 1520 Jefferson Highway, New Orleans, LA 70121.

- **POSTDOCTORAL POSITION**

Available to study insect molecular genetics. Research program focuses on the molecular genetic consequences and the development of insect gene vectors. Both drosophilid and non-drosophilid systems are employed. Appointment will begin in July 1991 and continue for 2 years. Applicants with experience in molecular genetics are preferred; however all applicants will be considered. Familiarity with insect systems not required. Send curriculum vitae and three names of references to: Dr. David A. O’Brochta, Center for Agricultural Biotechnology, 1206 H. J. Patterson Hall, University of Maryland, College Park, MD 20742. The University of Maryland is an Equal Opportunity Employer. Women and members of minority groups are specifically encouraged to apply.

- **POSTDOCTORAL POSITION IN IMMUNOLOGY**

The Department of Immunology, St Jude Children’s Research Hospital, invites applications for a Postdoctoral position in the signal transduction research laboratories of Dr. David A. O’Brochta, Center for Agricultural Biotechnology, 1206 H. J. Patterson Hall, University of Maryland, College Park, MD 20742. The University of Maryland is an Equal Opportunity Employer. Women and members of minority groups are specifically encouraged to apply.

- **POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY**

The Department of Immunology, St Jude Children’s Research Hospital, invites applications for a Postdoctoral position in the signal transduction research laboratories of Dr. Richard Mayne, Department of Cell Biology, Box 302, University of Alabama at Birmingham, Birmingham, AL 35294. The position is at Birmingham is an Equal Employment Opportunity/Affirmative Action Employer.

- **POSTDOCTORAL POSITION**

Available immediately for up to 5 years, to study internal-image antioxidiant antibodies and their ability to serve as endocrine mimics in vivo. This is a well-funded program which aims to regulate hormones of commercial interest to animal production through manipulation of the immune system. Substantial experience in the production of monoclonal antibodies is essential. Experience with, but not an expectation that, the individual will have experience with immunoglobulin genes, is also desirable, but not essential.

The University of Guelph is committed to an Employment Equity program that includes special measures to achieve diversity among its faculty and staff. We therefore particularly encourage applications from women, persons with disabilities, members of visible minorities, and women.

Send curriculum vitae and three references to: Dr. J. S. Walton, Department of Animal and Poultry Science, University of Guelph, Guelph, Ontario N1G 2W1, Canada.

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If you have relevant laboratory experience and strong theoretical knowledge, take advantage of this opportunity to join multi-disciplinary teams in one of the following areas:

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**Pulmonary Biology**—Investigate eosinophil function related to the discovery of novel anti-asthma drugs.

**Osteoporosis**—Perform and develop a variety of osteoporosis studies to discover novel therapeutic agents.

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Boehringer Ingelheim Pharmaceuticals, Inc. is engaged in the discovery, development, manufacture, and marketing of novel drug compounds. The following position is currently available in the Department of Toxicology and Safety Assessment at our Research and Development Center, located in DANBURY, CT.

**SENIOR TOXICOLOGIST**

This position will act as Study Director for in-house preclinical toxicology studies including the design and interpretation of scientific data. Other responsibilities include the monitoring of toxicology studies performed at contract labs and participating in the evaluation of new drug candidates. Requirements include a DVM or Ph.D in Toxicology, Pharmacology or related life science with two or more years post-doctoral experience as a Study Director for studies in support of new chemical/pharmaceutical agents. Boehringer Ingelheim offers a competitive salary and benefits package including relocation assistance. We will be interviewing candidates at the Society of Toxicology Placement Service in Dallas. If you are unable to meet with us, please send your curriculum vitae to Dept. JC-1S-027, Boehringer Ingelheim Pharmaceuticals, Inc., 90 East Ridge, PO. Box 368, Ridgefield, CT 06877. As a progressive health care company, we have a nonsmoking environment. We are an equal opportunity employer m/f/h/v.

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**Immunopharmacologist**

**Adhesion Molecules**

This position will be responsible for developing and performing in-vitro analyses of immune cell and endothelial cell adhesion molecule expression and function. A B.S. with 5-10 years experience or an M.S. with 4-6 years experience, plus a strong background in immunology and/or cell biology, are required. Familiarity with endothelial cell culture techniques and experience in in-vitro immunological testing procedures is preferred, but not required. Wyeth-Ayerst offers an excellent compensation and benefits package in our highly professional environment. Please forward resume with salary requirements to: WYETH-AYERST RESEARCH, Personnel Manager, Position #450, CN 8000, Princeton, NJ 08643-8000. An Equal Opportunity Employer, M/F/H/V. Principals Only.

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Lockheed Engineering & Sciences Company supplies management and technical resources to many government agencies and major corporations. Our Western Programs Office currently has several unique science management opportunities with its Flight Payloads Integration contract at NASA. Experiment Support Scientist positions offer an exciting environment for exceptional individuals to participate in NASA's Space Life Sciences research program.

Working at the Ames Research Center in Mountain View, California, you will support the Space Life Sciences Payloads Office in the development, integration and operation of space flight life sciences experimentation. The Science Management Department consists of life scientists who help integrate the research goals of principal investigators with the hardware and mission constraints/capabilities of the Space Shuttle. This requires close and continuing collaboration with investigators, NASA scientists and managers, and engineering staff.

As the primary contact with the principal investigator on all scientific issues, you will ensure the achievement of all scientific goals of the experiment. You will represent the investigator in all payload science issues, prepare documentation related to the scientific aspects of the experiment and assist with the conduct of the experiment.

You must have a PhD or MS plus laboratory experience, or equivalent work experience, in animal physiology, developmental biology or cellular and molecular biology. Experience with primate or rodent research is valuable. A publication record reflecting your research interests and experience is required. Excellent organizational and communication skills are essential.

Please forward a curriculum vitae and telephone number of two references to: Blythe Asagi, Human Resources, Lockheed Engineering & Sciences Company, P.O. Box 168, Moffett Field, CA 94035. Lockheed is an equal opportunity, affirmative action employer.
Baxter Diagnostics Inc., a leading supplier of diagnostic products and instrumentation for clinical laboratories. Continued growth and expansion has led to R&D opportunities in our Stratus® Reagent, Product Support and Paramax Chemistry R&D groups. These positions require highly motivated, results-oriented individuals with strong technical, communication and organizational skills.

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The ideal candidates for all positions will have a Ph.D. in a life science or an equivalent combination of education and work experience. These individuals will be well versed in EIA techniques with hands-on experience in their design and validation. Candidates with prior industrial experience will be given greater consideration.

**Associates**

**Imunochemistry and Chemistry**

Research Associates are members of the project team responsible for the day-to-day design, execution, and analysis of R&D experiments and will report to the Project Leader. These individuals should have a B.S. and 4-6 years industrial experience or a M.S. and 0-3 years industrial experience.

We offer an excellent scientific environment, supported by a highly competitive salary and complete benefits package. For confidential consideration, please send your resume with salary history, indicating position of interest, to: Baxter Diagnostics Inc., Human Resources, East Facility, #348, P.O. Box 520672, Miami, FL 33152. Equal Opportunity Employer. We Conduct Pre-Employment Drug Screening.

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TOXICOLOGISTS and PHARMACOLOGISTS

Battelle, a world leader in contract research and technical services, is expanding research efforts in toxicology and pharmacology. We have several professional positions available as described below:

Inhalation Toxicologist Involves generating and characterizing chemical atmospheres for large program inhalation studies. Includes documentation of purity and stability of test chemical atmospheres and running animal inhalation studies. Requires a PhD in toxicology, chemistry, or a related discipline and five years of experience in inhalation toxicology. Must be familiar with GLP.

General Toxicologist Involves designing and running general toxicity and preclinical safety studies for EPA, FDA, and international regulatory review. Work includes client interaction, protocol preparation, technical report writing, and project management. Requires a PhD in toxicology, pharmacology, or a related discipline and 2-3 years of relevant experience. Must be familiar with GLP.

Pharmacokineticist Involves study design and data analysis and interpretation for drug and chemical disposition, metabolism, and pharmacokinetics studies. Should be familiar with using a variety of common laboratory animals and techniques such as catheter implantations, radiotracer methods, autoradiography, and kinetic modeling methods. Requires a PhD in pharmacology, biochemistry or a closely related discipline and a minimum of 2 years of experience beyond the PhD.

Battelle offers competitive salaries, comprehensive benefits, and opportunities for career advancement. If interested, please contact us at the S.O.T. meeting or send your resume to: Mr. Richard Shaw, Battelle, Dept. 228, 505 King Avenue, Columbus, OH 43201-2693. An Equal Opportunity/Affirmative Action Employer M/F/D/V.

POSITIONS OPEN

POSTDOCTORAL POSITION. An NIH-funded postdoctoral position is available to investigate the translational control of maternal mRNAs and regulation of poly(A) removal and methylation [see Genes Dev. 4, 2278-2286 (1990)]. Training in molecular biology or biochemistry is preferred. Send curriculum vitae and three references to: Dr. Michael Worthington, Department of Biology, University of Virginia, Charlottesville, VA 22901. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION. To conduct a molecular genetic analysis of the development of malformations in the mouse. Candidates should have experience working with molecular biology and/or biochemistry of an insect. Please send curriculum vitae, brief description of recent research, and names of references to: Dr. Frank Collins, Division of Biomedical Sciences, Emory University, Atlanta, GA 30322. Telephone: 404-488-4010. FAX: 404-488-4427. Emory University is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS. Available in the laboratory of Dr. Albert Worthington. Research involves the study of genetic alterations that occur in human cancer and their underlying mechanisms. Research will utilize a molecular approach to analyze spontaneously occurring mutations in the PDGF and PDGFR beta gene and determine their role in signal transduction protein in tumorigenesis. Familiarity with the methods of molecular biology preferred. Submit curriculum vitae and names of references to: Dr. Albert Worthington, Department, MAS, DAW, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS. In plant science available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Western Regional Research Center, 800 Buchanan St., Albany, CA 94710. (i) PLANT GENOME STRUCTURE. Experience in the genomic sequence of the cereals wheat and rice. Participate in an effort to understand the structure and organization of several multigene quality-related loci and the more general questions involving organization of the genome background in molecular biology/biochemistry. Contact: Dr. Olaf D. Anderson, 415-589-5773. (ii) MONOCOT TRANSFORMATION. Explore strategies for monocot transformation. Develop regeneration competent wheat tissue cultures, and utilize in studies of stable integration and tissue-specific expression. Experience in plant tissue culture, genetics, and recombinant DNA desirable. Contact: Dr. Frank C. Greene, 415-589-5614. Both positions are for 2 years. Salary: $31,316 to $37,208. USDA, ARS, is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL FELLOW. Position available in the Research Medicine/Radiation Biophysics Division, Lawrence Berkeley Laboratory (LBL), to investigate the biological effects of highLET radiation fields on signal transduction and calcium metabolism in the lymphocyte. These in vitro studies involve biological and biochemical characterization of signal transduction pathways, activated by antibody and mitogens, in the lymphocyte. Requires a Ph.D. within the last 4 years. Training in bioelectromagnetics or related field preferred. One-year term appointment, renewable up to 3 years. Send resume and names and addresses of three references to: Dr. Robert Liburdy, c/o LBL, M.S. 90-1042, Berkeley, CA 94720. Job #40262. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW, MOLECULAR GENETICS. Laboratory examines the pattern of spontaneous germline and somatic mutation in humans and other organisms; substantial effort is devoted to developing better PGK knockouts. Research interests: “Ectopic gene expression/rapid cross-species sequencing of factor IX,” Science 244, 331-334 (1989); “Pattern of mutations in hemophilia B,” Am. J. Hum. Genet. 47, 202-217 (1990); “Are most mutations endogenous,” Nature 346, 22-23 (1990). Send curriculum vitae and names, addresses, and telephone number of three references to: Steve S. Sommer, M.D., Ph.D., Associate Professor, Department of Biochemistry and Molecular Biology, Mayo Clinic and School of Medicine, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITIONS DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

Postdoctoral positions are available in the areas of membrane protein structure and function, electrophysiological and biophysical approaches, cell physiology, and biophysics.

Applicants should send a letter and curriculum vitae, the names and addresses of three references, a list of publications, and a brief letter describing past and present research activities as well as future plans to: Christine G. Schulli, Coordinator of Educational Programs, Department of Physiology and Biophysics, Case Western Reserve University, 2109 Adelbert Road, Cleveland, OH 44106-4109. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available for recent Ph.D. graduates in biochemistry and molecular biology who have worked on mechanisms of gonadotropin, EGF, and eicosanoid action. Candidates with experience in the techniques of biochemistry and molecular biology such as subcellular fractionsation and mass spectrometry in purification and enzyme purification, measurement of eicosanoid synthetic and other enzyme activities, in vitro transcription, and RNA hybridization, or DNA and RNA isolation, cloning, preparation and labeling of DNA and RNA probes, hybridization, protein, RNA and DNA blotting are considered. For more information, contact: Dr. Ch. V. Rao, Department of Obstetrics/Gynecology, 438 MDR Building, University of Louisville School of Medicine, Louisville, KY 40292. FAX: 502-858-0881 and arrange to send four recommendation letters.

INTERNATIONAL CANCER RESEARCH FELLOWSHIP

The Hayashibara Foundation, a nonprofit-making organization within the Hayashibara Group, announces a fellowship program. Fellowship will be taken at the Fujisaki Cell Center which is devoted to basic and applied research related to the problems in human cancer. The fellowship is normally made for 1 year and is renewable for up to 5 years. The fellowship will be expected to commence within 6 months of the announcement of the awards. No fixed deadline for application is set through the year. The high-quality research work in one of the three categories described below:

- Fundamental leukemia-lymphoma research
- Cytokine-lipid mediator research
- Hematopoietic cell lines

Qualified person who is holding a Ph.D., M.D., or equivalent qualifications who should inquire for additional information and application forms from: Jun Minowada, M.D., Director, Fujisaki Cell Center, 675-1, Fujisaki, Okayama 702, Japan.

POSTDOCTORAL FELLOW. A position is available immediately for a postdoctoral fellow to participate in studies using in situ hybridization to explore human vascular disease. The goal of these studies is to define factor(s) synthesized locally in the vessel wall which contribute to smooth muscle differentiation and/or proliferation in atherothrombogenesis/restenosis lesions [J. Clin. Invest. 82, 1134 (1988); Proc. Natl. Acad. Sci. U.S.A. 86, 2839 (1989)]. Previous experience in molecular biology, and/or cell biology is desirable. Send curriculum vitae and names of three references to: Dr. Josiah N. Wilcox, Division of Hematology/Oncology, Department of Medicine, Emory University, Atlanta, GA 30322. We are an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW. To study; (i) molecular biological/biochemical questions in the eye by aging, nutrition, protease, and/or antioxidant defense; (ii) mechanisms of life extension via dietary caloric restriction. List of projects available. Must be eligible to work in the United States. Send resume and three letters of reference to: Dr. Taylor, USDA–Tufts Human Nutrition Research Center, 711 Washington Street, Boston, MA 02111. Indicate date you are available. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITIONS IN DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

Send a letter with curriculum vitae, the names and addresses of three references, a list of publications, and a brief letter describing past and present research activities as well as future plans to: Christine G. Schulli, Coordinator of Educational Programs, Department of Physiology and Biophysics, Case Western Reserve University, 2109 Adelbert Road, Cleveland, OH 44106-4109. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available for recent Ph.D. graduates in biochemistry and molecular biology who have worked on mechanisms of gonadotropin, EGF, and eicosanoid action. Candidates with experience in the techniques of biochemistry and molecular biology such as subcellular fractionsation and mass spectrometry in purification and enzyme purification, measurement of eicosanoid synthetic and other enzyme activities, in vitro transcription, and RNA hybridization, or DNA and RNA isolation, cloning, preparation and labeling of DNA and RNA probes, hybridization, protein, RNA and DNA blotting are considered. For more information, contact: Dr. Ch. V. Rao, Department of Obstetrics/Gynecology, 438 MDR Building, University of Louisville School of Medicine, Louisville, KY 40292. FAX: 502-858-0881 and arrange to send four recommendation letters.

SCIENCE, VOL. 251
NEUROSCIENCE RESEARCH

The ICI Pharmaceuticals Group, dedicated to the challenge of discovering and developing important new therapeutic agents, is seeking pharmacologists for the CNS drug discovery research group based in Wilmington, Delaware. The successful candidates will be part of an interdisciplinary team involved in exploring the interactions of neuropeptides and neurotransmission. The environment offers modern laboratory facilities supported by state-of-the-art technology.

Neuroscientist/Molecular Pharmacologist

PhD in Pharmacology/Biochemistry with a minimum of 3 years' postdoctoral experience required. Proven application of molecular biology concepts and techniques, including gene cloning and transfection into mammalian cells necessary. Experience with receptor-mediated second messenger coupling mechanisms desired.

Postdoctoral Assignments

Two industrial research positions sponsored by the Department of Pharmacology of the University of Pennsylvania. One year appointments with the potential to renew. Experience and research interests in neurochemical pharmacology and tissue culture techniques required. Knowledge of molecular biology preferred.

Enjoy the benefits of belonging to a worldwide organization with the professional and financial resources to support and sustain aggressive long-term research.

For consideration, submit c.v. to Mary P. Grigas, ICI Pharmaceuticals Group, Wilmington, DE 19897.

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A Specialty Laboratories, Inc. is a leading provider of diagnostic and prognostic test services. With our wide spectrum of expertise and superior research capabilities, we strive to "lead the future" with a continual need for skilled professionals.

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The R.W. Johnson Pharmaceutical Research Institute integrates worldwide R&D efforts for five Johnson & Johnson companies to maximize our traditional R&D efforts and our strengths in biotechnology. Expanding drug discovery programs have created an immediate opportunity with the Drug Metabolism Department at our campus-like setting in Raritan, NJ.

The successful candidate will have an MA/MS in Chemistry, Biochemistry or related field and at least 3 years' experience; or a BS with at least 6 years' experience. Familiarity with chromatographic instrumentation required. Using bioanalytical methodology, you will develop assays for the determination of drugs and their metabolites in biological fluids and tissues.

We offer a competitive salary and comprehensive benefits including health/dental insurance, 401(k) plan, tuition reimbursement, our LIVE FOR LIFE Wellness Program with on-site fitness center, and a smoke-free workplace.

Please send your resume, including salary requirements, to:
Mr. Thomas Hutton, Human Resources Dept. 6, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602.

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POSTDOCTORAL/RESEARCH ASSOCIATE.

Molecular biology, biochemistry, and cell biology. Study regulatory consequences of ligand-receptor interaction at the transcriptional and post-transcriptional levels, DNA cloning and sequence determination, and structure-function relationships, and intracellular routing. Experience in molecular biology techniques, receptor methodology/isolation/cloning would be advantageous. Available immediately. Stimulating environment. Competitive salary. Send curriculum vitae and names of references to: Dr. Ann Smith, School of Basic Life Sciences, University of California, Berkeley, California 94720. U.S. Address is an Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL

A position is currently available to study genotoxic stress responses in mammalian cell. Emphasis will be placed on the role of DNA damage-inducible genes that play a role(s) in negative growth control. Studies will also focus on the regulation of HIV-1 regulatory features shared with cellular stress-response genes. Experience in molecular biology and/or protein biochemistry in the field of DNA and characterization of DNA-binding proteins, is desirable. Salary for a postdoctoral fellow (more than 3 years of experience) or a research associate (up to 5 years of postdoctoral experience) is $51,000-$54,000 per year. Send curriculum vitae and names of three references to: Dr. J. A. Fornace, Laboratory of Molecular Pharmacology, Building 37, Rockefeller University, 600 First Avenue, New York, NY 10021. FAX: 212-741-5498. An Equal Opportunity/Affirmative Action Employer.

ORGANIC CHEMIST

Work at the forefront in the development of new probe technology. Design, synthesizes, tests, and new fluorescent dyes as probes to elucidate the structure, function, and health of biological cells and tissues. Skills in organic synthesis and chemical reactions, and knowledge of optical spectroscopic properties of organic chromophores is desirable. Recent or experienced postdoctoral associates will be considered. Write to: Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST

To investigate the genetics of plasmodia isolated from rapidly fertilizing parasites, with emphasis on the genetic elements, vectors, and the development of transformation methodology. Also requires the ability to train and teach laboratory personnel the mycobacteriological techniques involved. Applicant must have a Ph.D. degree in microbiology with 4 to 5 years of relevant research experience, publications in the field, and the ability to write and function in a strong independent research program in this area. Four hours per week; $30,000 per year. Submit curriculum vitae, a statement of research interest, and three reference letters to: Dr. Arthur Bollon, Chairman, Department of Molecular Genetics, Wadley Institutes, 9000 Harry Hines Drive, Dallas, TX 75235. Equal Opportunity Employer, M/F, Non-smoker.

RESEARCH ASSOCIATE

Isolation, characterization, and functional expression of calcium-activated anion transporters from arthropod venoms. Involves HPLC purification of peptide toxins and use in binding and ion flux assays with a range of different cell types. B.S. or M.S. in biological sciences; on the job training available. Salary: $24,800 per year with full benefits. Curriculum vitae to: M. E. Adams, Entomology Department, University of California, Berkeley, California 94720. UCR, 92251. UCR is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE

To conduct research oriented to the study of inflammatory and neoplastic conditions of the stomach. Duties include the analysis of human and experimental gastric histology, enzyme immunohistochemistry, enzyme immunocytochemistry, and flow cytometry. Ph.D. in pathology or M.D. required. Also, 1 year in job offered or 1 year as a pathologist required; 3 years, 4,570 per year; 2 years, 4,990 per year; 1 year, 5,990 per year; 0 year, 6,500 per year. Contact: Louis O. Ball, Job Order 682225, 617 St. Charles Avenue, New Orleans, LA 70130.

RESEARCH ASSOCIATE. Forty hours per week, 8:30 a.m. to 5:30 p.m.; $166.66 per month. Development of apparatus and experimental protocols for fuel equivalence ratio imaging in combustion systems. Use of 3D reconstruction from images to determine reaction zones and temperature fields. Development of optimum composition and emission properties of amine-containing exciplex-based vapor/liquid visualization systems. Development of instrumentation and computational approaches for fuel equivalence ratio measurement. Use of picosecond laser for time-resolution. Digitization of signals and transferring them to computers for further processing. Actual experience in combustion systems, fuel equivalence ratio, laser diagnostics, and computer programming. Past scientific research publication in photochemistry or photochemistry, including use of pulsed laser-excitation. Apply at the Texas Employment Commission, Dallas, Texas, or send résumé to: Texas Employment Commission, TEC Building, Austin, TX 78770. Ad paid by an Equal Opportunity Employer.

RESEARCH ASSOCIATE. To conduct independent research on the structure and evolution of storage tissue in higher plants. Will involve isolation and sequence analysis of promoter elements from evolutionarily divergent species with different patterns of storage tissue differentiation, and to determine gene expression of storage tissue promoters in dicotyledonous and monocotyledonous species. Experience in molecular biology and gene isolation is essential. Send references, and experience in isolation and characterization of promoters in higher plants. Send résumé to: Texas Employment Commission, Bryan, Texas, or send résumé to: Texas Employment Commission, TEC Building, Austin, TX 78778, Job Order #6139018. Ad paid by an Equal Opportunity Employer.

VERTEBRATE BIOLOGIST RESEARCH ASSOCIATE

The Center for Water and the Environment of the Natural Resources Research Institute is looking for a vertebrate biologist to join a core group of researchers to study the effects of natural resources development on ecological systems. The successful applicant should have broad training in vertebrate biology, ecology, and conservation biology.

Minimum qualifications for the position include at least a Ph.D. in ecology, biology, or closely related field, five years post-doctoral training and research experience in the use of statistics including multivariate statistics, the ability to identify Minnesota's forest birds by sight and sound, and the physical ability to work in a variety of field environments.

The position will be a fixed-term appointment of up to 3 years under the University of Minnesota's Professional and Academic Staff. Salary is negotiable. The position is expected to begin around 1 July 1991.

To apply send an application letter, résumé, and the names, addresses, and telephone numbers of three references to: Vertebrate Biologist Search Committee, Natural Resources Research Institute, 5013 Miller Trunk Highway, Duluth, Minnesota 55811. Applications must be postmarked by 15 March 1991.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

RESEARCH INVESTIGATOR IN PERINATAL RESEARCH LABORATORY

Requires doctoral degree or equivalent education and experience in a related research area. Previous experience in isolated vertebral smooth muscle or other working knowledge of its control and the role of the endothelin in it is highly desirable; $24,500 starting salary.

Send résumé to: Research Investigator/Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply. Send résumé to: Carl Weiner, M.D., Department of Obstetrics and Gynecology, The University of Iowa Hospitals, Iowa City, IA 52242.
Neurobiology and Cellular Physiology Associate Scientists

Research positions are available in the following areas:

Regulation of Epithelial Functions
Study of the control of tight junction permeability and the role of exo- and endocytosis in the regulation of epithelial function by hormones and changes in ionic environment. The Associate will be involved in experiments using optical, ultrastructural and electrophysiological techniques. Experience in fluorescence imaging, electron microscopy or electrophysiology preferred. Project Director: Dr. David Elrich, Department of Physiology, Box 31.

Cortical and Subcortical Contributions to Rhythmic Activity in a Network
Study of the mechanisms underlying gating, pacing and generation of the hippocampal theta rhythm using electrophysiological and immunohistochemical techniques. The Associate will participate in determining the roles of extrinsic afferents in the brain state associated with rhythmic activity. Experience in electrophysiology and/or immunocytochemistry preferred. Project Director: Dr. Steven E. Fox, Department of Physiology, Box 31.

Neurobiology of Chemical Senses.
Study of peripheral and central mechanisms of nasal chemical senses using electrophysiological techniques. The Associate will participate in an interdisciplinary program using behavioral, biochemical and anatomical techniques to understand the molecular and cellular basis of vomeronasal system transduction and central processing. Experience in single cell recording techniques preferred. Project Director: Dr. Mimi Haipern, Department of Anatomy and Cell Biology, Box 5.

Salary range: $23,000 to $27,000
Candidates with a Ph.D. degree should submit a CV and two letters of reference to the Project Director (listed above).

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TOXICOLOGIST

The Division of Biochemical Toxicology of FDA's National Center for Toxicological Research (NCTR) has an opening for a STAFF SCIENTIST. Ongoing research in the division is concentrated on the role of DNA adducts in mutagenesis and carcinogenesis, the importance of genetic heterogeneity in carcinogen activation and deactivation, drug-induced hypersensitivities, and the development of assay techniques and mass spectrometric methods to detect toxic responses. NCTR is seeking an individual with research interests that complement these areas, and who will cooperate with other scientists in research interests in other areas related to biochemical mechanisms of toxicity. The opening is a civil service position at the GS-12 ($37,294) to GS-14 ($52,406) level and is dependent upon availability of funds. Please send a letter including an outline of proposed research to: Frederick A. Beland, Director, Division of Biochemical Toxicology, NCTR, Jefferson, AR 72079. DHHS/PHS/ FDA/NCTR is an Equal Opportunity/Affirmative Action Employer. Qualified men and minority candidates are especially encouraged to apply.

PHARMACOKINETICS/TOXICOLOGY/RISK ASSESSMENT

Expansion of our Biosimulation Research Program will make a position available for a Ph.D. (or equivalent) to develop physiologically based computer simulation models. Solid background in biology/biochemistry/chemistry, with interest and ability to apply these skills to computer simulation modeling. Successful applicant will design and execute laboratory studies to support the development of physiologically based models. This individual will work closely with other physicians and scientists in the Division of Health Assessment to develop human risk assessments for the toxicants of interest. Publication of all results and presentation at national meetings is encouraged. Title and salary will be commensurate with background and experience. Interested individuals should send curriculum vitae, together with names and addresses of three references, to: Dr. Murray E. Human, Human Toxicology/04, ManTech Environmental Technology, Inc., A Subsidiary of ManTech International Corporation, P.O. Box 31009, Dayton, OH 45431-0099. ManTech Environmental Technology, Inc., is an Equal Opportunity Employer.

RESEARCH SCIENTIST

Applications are invited for a highly motivated scientist in the Florida Comprehensive Cancer and Leukemia Research Center. Applicants must have a Ph.D. in biochemistry with emphasis in protein chemistry. Postdoctoral experience is highly desirable. Available immediately to pursue and characterize recombinant ricin toxin molecules produced in E. coli and yeast. Studies from this laboratory include M. Cell. Biol. 9, 5012-5021 (1989); Mol. Cell. Biol. 10, 6257-6263 (1990). Interested candidates are invited to send their curriculum vitae, bibliography, and three letters of recommendation to: Dr. Arthur Frankel, Director, Florida Hospital Cancer and Leukemia Research Center, 616 East Altamonte Drive, Altamonte Springs, FL 32701 (Greater Orlando Area). Telephone: 407-383-1004.

ASSISTANT RESEARCHER

Hawaii Institute of Tropical Agriculture and Human Resources, University of Hawaii, Biotechnology Program, full time, tenured position, to begin approximately 15 April 1991. Duties: establish a major program in the area of nitrogen fixation, and molecular genetics of tropical rhizobia; collaborate with NifTAL in tropical symbiotic nitrogen fixation studies, teach occasional courses in the general area of plant-microbe interaction, generate extramural funding. Minimum qualifications: Ph.D. in rhizobial molecular genetics, at least 2 years of postdoctoral experience in the molecular genetics of nitrogen fixation, and also 2 years of research experience with tropical legumes. Minimum salary: $35,376 per year. Please send letter of application along with curriculum vitae and names of three references to: Suresh S. Patil, Director, Biotechnology Program, University of Hawaii, 3800 Maile Way, Honolulu, HI 96822. Closing date: 15 March 1991. An Equal Opportunity/Affirmative Action Employer.

PHOSPHORUS OPEN

CARBOHYDRATE CHEMIST—RESEARCH SCIENTIST for small start-up company in California developing novel oligosaccharide sequencing technology. Ph.D. or equivalent degree in carbohydrate structure and conventional sequencing technology required. Competitive industrial salary and fringe benefits offered. Job requires staffing and laboratory supervisor position. Send resume to: Glyko, Inc. 81 Digital Drive, Novato, CA 94949.

RESEARCH SCIENTIST

DIABETES RESEARCH LABORATORIES

Newly created position available to develop an independent diabetes research program involving the insulin gene and its regulation. Applicants must have a doctoral degree (or its equivalent) with in-depth experience with molecular biology research, a minimum of 2 years of postdoctoral experience, and a broad base of demonstrated research skills qualifying one to design and carry out innovative experiments and to write manuscripts and competitive grants. For consideration, send curriculum vitae to: Mary B. Davidson, M.D., Division of Endocrinology, Becker Building 131, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, CA 90048.

COURSES AND TRAINING

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two years. The Division of Optometry, College of Optometry, University of Southern California, Southern California College of Optometry, in cooperation with the College of Medicine, University of Southern California, offers a unique interdisciplinary program that allows the candidate to utilize the skills and knowledge gained in the sciences with which he or she is familiar, to prepare for a career in private practice, industry, education, and research. Contact: Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.

MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC) offers programs leading to Ph.D. and M.D./Ph.D. degrees in each of the basic biomedical sciences (molecular, cellular, immunology, pathology, pharmacology, physiology), bacteriology/epidemiology/systems science, and pharmacology. Contact: Dr. Stephen W. Smith, M.D., Chairman, Division of Research, Medical University of South Carolina, Charleston, SC 29425.

NEUROSCIENCE AT BAYLOR COLLEGE OF MEDICINE

The Division of Neuroscience at Baylor College of Medicine is offering positions at the Assistant Professor level. Interested applicants should send a letter of application, curriculum vitae, and names and addresses of three references to: Dr. Richard S. Colman, Director, Graduate School, Department of Neurology, 1 Baylor Plaza, Houston, TX 77231 to: Prospect Associates, 401 Prospect Street, Suite 131, New Haven, CT 06511. Telephone: 203-426-8002.

GRADUATE PROGRAM IN CANCER BIOLOGY

The Meyer L. Prentis Comprehensive Cancer Center of Detroit and Wayne State University have established a TRAINING PROGRAM in cancer biology which includes more than 30 faculty from Wayne State University and the Prentis Foundation. The program offers a broad-based, multidisciplinary curriculum directed to the training of individuals who want to pursue careers in cancer research in academic, industrial, or governmental institutions. The primary research areas include: molecular oncology, carcinogenesis, developmental therapeutics, tumor metastasis, cancer immunology, and breast cancer. The program fosters innovative, interdisciplinary basic research in all of the above areas. Qualified individuals will receive competitive national support. Postdoctoral fellowships are also available in the above areas with participating faculty. For further information contact: Dr. W. Kellogg Babcock, Director, Graduate Program in Cancer Biology, Department of Pharmacology, Wayne State University School of Medicine, 540 East Canfield Street, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

MEETINGS

BIOTECHNOLOGY PATENT CONFERENCE.


STROMAL REGULATION OF HEMATOPOIESIS

21-22 JUNE 1991/BETHESDA, MARYLAND

An NIH symposium to address the role of bone marrow stromal cells, the extracellular matrix, and the hematopoietic microenvironment in the regulation of cellular differentiation and proliferation. Keynote address and symposium summary by Nobel laureate E. Donnall Thomas. Abstracts are being accepted (until 1 May 1991) for poster presentation. For registration, contact: Prospect Associates, Conference Department, 301-468-MEET. For information, contact: A. Levine, NIH/NIHBI, 301-496-9111 or D. Badman, NIDDK, at 301-496-7458.

ANNOUNCEMENTS

CALL FOR RESEARCH PROPOSALS

The Johns Hopkins Center for Alternatives to Animal Testing (CAAT) is soliciting proposals for the 1992-93 fiscal year. CAAT would provide fundamental knowledge needed to develop alternative methods to whole animals for the safety evaluation of commercial products. CAAT encourages the development of in vitro approaches to toxicity evaluation including, but not limited to, methods using human cellular lines and studies in the areas of skin hypersensitivity/toxicity, phototoxicity, target organ toxicity (e.g., neurotoxicity), and structure-activity relationships. Funds are not available for mutagenicity and carcinogenicity testing.

To apply, submit a one-page pre-proposal abstract (no specific format required) to: Mrs. Joan Poling, CAAT, 515 North Wolfe Street, Baltimore, MD 21205. Telephone: 301-955-3193. FAX: 301-955-0258.

You will be notified of acceptance and sent guidelines for preparation of proposals. Deadline for submission of abstracts is 16 March 1991.


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