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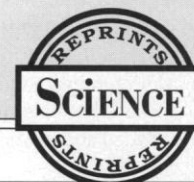
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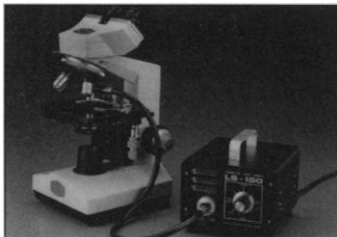
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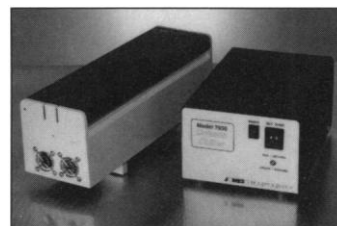
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POSITIONS OPEN

ASSISTANT PROFESSOR OF CELL BIOLOGY AND NEUROSCIENCE

A full-time tenure-track faculty position will be available 1 July 1992. Applicants should be capable of establishing an independent research program supported with extramural funds. While the specific area of research is open, individuals conducting research in reproductive biology or neuroendocrinology who utilize cell and/or molecular biological approaches are encouraged to apply. The successful candidate will participate in the teaching of medical microanatomy to medical students. Curriculum vitae, representative publications, and the names of three references should be sent to: **Dr. Charles A. Blake, Department of Cell Biology and Neuroscience, University of South Carolina School of Medicine, Columbia, SC 29208.** *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN CANCER BIOLOGY OR CARCINOGENESIS. Outstanding candidates are invited to apply for a tenure-track position as an **ASSISTANT PROFESSOR** of oncology in the McArdle Laboratory for Cancer Research at the University of Wisconsin-Madison. The McArdle Laboratory is a higher interactive cancer center committed to understanding the origins, therapy, and prevention of cancer through basic research. Applicants should be prepared to develop a strong, independent research program in one of the following areas: mechanisms of carcinogenesis; activities of tumor suppressor gene products, oncoproteins, or growth factors; regulation of the cell cycle; or genetics of cancer development. To be considered, submit curriculum vitae, publication list, a two- to three-page statement of research accomplishments and future objectives, and have sent letters of recommendation from three qualified individuals. Review of the applications will start on 1 June 1992. Applications and letters of recommendation should be sent to: **Faculty Search Committee, McArdle Laboratory for Cancer Research, University of Wisconsin, 1400 University Avenue, Madison, WI 53706.** *An Equal Opportunity/Affirmative Action Employer. Wisconsin State laws permit public access to names, addresses and occupations of applicants.*

FACULTY POSITION AVAILABLE as **ASSISTANT PROFESSOR** (nontenure track) in the Department of Biochemistry working in the area of signal transduction. Minimum qualifications include a Ph.D. or M.D. degree, 3 to 4 years of postdoctoral experience and evidence of significant research accomplishments in regulatory biochemistry. Evidence of ability to attract extramural funding is expected. Preference will be given to applicants who can interact with existing faculty working in this area. Applicants should send their curriculum vitae to: **Dr. John N. Fain, Department of Biochemistry, University of Tennessee, Memphis, TN 38163.** Position is available 1 July 1992. *The University of Tennessee is an Equal Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Women and minorities are encouraged to apply.*

NEUROBIOLOGY FACULTY POSITIONS

The Neurobiology Research Center at the University of Alabama at Birmingham (UAB) School of Medicine invites applications for two faculty positions at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level. Applicants for Assistant Professor should have at least 2 years of postdoctoral experience. The center is seeking individuals with a strong record of achievement using modern approaches to neurobiology whose interests complement those of current members. Researchers using molecular approaches are especially encouraged to apply. Current interests of the faculty are systems and cellular neurobiology, membrane biophysics, synaptic plasticity and modulation, cellular and molecular basis of neurodevelopment, signal transduction and intracellular signaling. The center has excellent research facilities and has recently been provided with new space in the Civitan International Research Complex on the UAB campus. The development of the center is supported by funds from the state and the Lucille P. Markey Charitable Trust.

Send curriculum vitae and statement of research plans and have three letters of recommendation sent to: **Michael J. Friedlander, Ph.D., Neurobiology Research Center, University of Alabama at Birmingham, Birmingham, AL 35294** by 30 September 1992. *UAB is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

BIOLOGY FACULTY POSITION. Opening for fall 1992. The Department of Biology at the College of St. Catherine seeks a broadly trained biologist to fill a part-time temporary **ASSISTANT PROFESSOR** position beginning in the fall of 1992. The prospective applicant must have a Ph.D. and demonstrate excellence in teaching. Courses to be taught include neurobiology, anatomy and physiology II and labs for nonmajors, and comparative physiology and labs for majors. Send letter of interest, curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching interests to: **Dr. Kay Tweeten, Department of Biology.** Position will remain open until filled, but for best consideration applications should be postmarked by 15 June 1992. **The College of St. Catherine, 2004 Randolph Avenue, St. Paul, MN 55105.** *Equal Employment Opportunity/Affirmative Action Employer. Job Line 612-690-6425.*

MOLECULAR/CELL BIOLOGIST. Immediate opening for tenure-track **ASSISTANT PROFESSOR** in Department of Neurology, Columbia University. Minimum requirements are Ph.D. in molecular biology and 3 years of postdoctoral research experience which has included protein chemistry, tissue culture, and genetic manipulation of cells and organelles. Candidates must be capable of obtaining independent research support. Preference given to individual with experience in mitochondrial genetics. Send curriculum vitae and names of three references to: **Dr. Timothy A. Pedley, Department of Neurology, 710 West 168th Street, New York, NY 10032.** *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION MICROBIOLOGY AND IMMUNOLOGY

Applications for two tenure-track **ASSISTANT PROFESSORSHIPS** are invited from candidates with backgrounds in virology, immunology, prokaryotic biology, or cell biology utilizing molecular and/or cellular technologies. Our research programs focus on the pathogenesis of infectious diseases and/or gene expression of normal and neoplastic cells. Candidates should possess a Ph.D. or M.D. degree and exhibit a high potential to establish an independently funded research program. Send curriculum vitae, bibliography, statements of research and teaching interests, and arrange for three letters of reference to be sent to: **John M. Lehman, Ph.D., Department of Microbiology, Immunology and Molecular Genetics A-68, Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.**

The Albany Medical Center is an Equal Opportunity/Affirmative Action Employer.

PSYCHOIMMUNOLOGY Ph.D. RESEARCHER. ASSISTANT OR ASSOCIATE PROFESSOR level, with 2 to 5 years of previous academic experience. This individual will participate in the development of immunological studies of the relationship of stress and depression with course of medical illness. The individual should be experienced in laboratory techniques, research design, and data analysis. Previous extramural funding is highly desirable. Please contact: **Allan Tasman, M.D., Professor and Chairman, Department of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine, Louisville, KY 40292; telephone: 502-588-1126.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT/ASSOCIATE PROFESSOR. University of California, Davis (UCD), Department of Cell Biology and Human Anatomy. Full-time, tenure-track faculty position to teach human gross anatomy to medical students. Appointment level commensurate with qualifications and experience. Ph.D. degree in a biological science and at least 2 years of postdoctoral experience or a medical degree (M.D.) with comparable research experience required. Experience as a faculty member in teaching human gross anatomy, an independent research program as demonstrated by publications in peer-review journals or extramurally funded research grants required. Investigators that combine cellular and molecular approaches to study mechanisms of cell regulation are especially encouraged to apply. Send curriculum vitae and names of five references to: **Kent L. Erickson, Ph.D., Department of Cell Biology and Human Anatomy, School of Medicine, University of California, Davis, CA 95616-8643.** Position will remain open until filled. Applications will not be accepted after 1 July 1992. *UCD is an Equal Employment Opportunity/Affirmative Action Employer.*



MEDICAL DEVICE RISK ASSESSMENT PROGRAM INTERDISCIPLINARY POSITIONS TOXICOLOGIST, BIOLOGIST, CHEMIST, PHARMACOLOGIST Rockville, Maryland

HHS/PHS/Food and Drug Administration, Center for Devices and Radiological Health is seeking three scientists to participate in a program leading toward improved understanding and evaluation of the risks involved with the use of medical devices. The candidates selected will perform risk assessments and conduct research related to the conduct of risk assessments, e.g., concerning mechanisms of toxicity, and will apply the results and the research of others to the qualitative and quantitative analysis of the risks posed by the use of medical devices. Qualifications Required: Minimum of a full 4-year or longer course of study in an accredited college or university leading to a bachelor's or higher degree with major study in an appropriate discipline or field of the biological, medical or veterinary sciences. The applicants must have a record of recent research or significant analytic activity in one or more of the following areas as related to risk assessment: 1) mechanisms of carcinogenesis, neurotoxicity, developmental toxicity or other site-specific toxicity, 2) physiologically-based pharmacokinetic modeling, or 3) use of animal bioassay data in the prediction of effects of low-level human exposure. One position may be for a risk assessment coordinator. Salary range for toxicologist, biologist, chemist, and pharmacologist is \$46,210 to \$60,070 at the GS-13 level, and \$54,607 to \$70,987 at the GS-14 level. **An Application for Federal Employment Form (SF-171), and Certificate of Scholastic Achievement (Form 1170/17), both of which can be found at any U.S. Government Personnel Office or most Post Offices, should be sent by June 1, 1992, to Charles L. Best, FDA/CDRH, HFZ-105, 12720 Twinbrook Parkway, Rockville, MD 20852. FDA is an equal opportunity employer and has a smoke free environment. All applicants must meet all civil service requirements including U.S. Citizenship.**

RESEARCH SCIENTIST

The Biological Testing Branch, Developmental Therapeutics Program, Division of Cancer Treatment, National Cancer Institute, National Institutes of Health, Public Health Service, is accepting applications for a senior level Biologist, Microbiologist or Veterinary Medical Officer position.

The incumbent will have the unique opportunity to assist in the development of preclinical *in vivo* testing efforts to correlate with the human tumor *in vitro* screen for potentially active cancer chemotherapy agents. This position will play an active role in the design and implementation of protocols to follow-up existing leads and explore newer methodology.

Applicants should have a doctoral degree or equivalent experience in appropriate scientific disciplines that would permit planning and execution of innovative and routine *in vivo* testing.

The position is located at the Frederick Cancer Research & Development Center in Frederick, Maryland. Salary commensurate with experience and expertise beginning at \$54,607 (GS-401/701-14). Send curriculum vitae and SF-171, Application for Federal Employment to:

Dr. Joseph G. Mayo
Biological Testing Branch
National Cancer Institute-FCRDC
Building 321, Room 7
Frederick, Maryland 21702-1201
Telephone: (301) 846-5065



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**University of Maryland
School of Medicine
655 W. Baltimore St.
Baltimore, MD 21201**

RESEARCH ASSOCIATE position available July 1, 1992, for studies on ion distribution in cultured astrocytes and vascular myocytes utilizing digital imaging methods. Experience with digital imaging microfluorometry and dual wavelength spectrofluorometry using ion-selective dyes for measurements of Na^+ , Ca^{2+} , and H^+ is essential. Experience with tissue culture methods and with the use of microcomputers is required. Ph.D. in biophysics, training in biochemistry and physical-organic chemistry, and minimum of 6 years postdoctoral experience required. Send curriculum vitae and have three letters of reference mailed by **July 1, 1992** to: **Mordecai P. Blaustein, M.D., Department of Physiology**

RESEARCH ASSOCIATE position available July 1, 1992, for studies on the role of glial cells in neuronal interactions in the degeneration of nerve cells in rodent models of neurodegenerative disease. Experience in the preparation and maintenance of primary cultures of neurons and glial cells immunohistochemistry, SDS-PAGE and Western blot analysis, cell purification by immunological panning methods, video microscopy, and maintenance of transgenic animals is essential. Ph.D. in physiology, pharmacology or related discipline and a minimum of 5 years postdoctoral experience in neurobiology is required. Send curriculum vitae and have three letters of reference mailed by **July 1, 1992** to: **Dr. Paul Yarowsky, Department of Pharmacology & Experimental Therapeutics**

RESEARCH ASSISTANT PROFESSOR, non-tenure track. Applicants must have 4 years experience in research and teaching in the following areas: immunocytochemistry, steroid biosynthesis, endocrinology of reproduction, breast and prostatic cancers. Applicants should send curriculum vitae, and names and addresses of 4 referees to: **Dr. D. Burt, Search Committee, Department of Pharmacology.**

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CHAIRMAN

DEPARTMENT OF PATHOLOGY

Roswell Park Cancer Institute is seeking a Chairman for the Department of Pathology. This internationally-renowned comprehensive cancer center is entering a period of renewed growth. Opportunity for research and academic activity is outstanding. Substantial academic credentials and an interest in research are highly desired. A faculty appointment will be at the School of Medicine and Biomedical Sciences, SUNY at Buffalo, according to the level of professional qualifications.



Curriculum vitae should be sent to:

Nicholas J. Petrelli, M.D.
Chairman, Search Committee
Department of Surgical Oncology
Roswell Park Cancer Institute
Elm and Carlton Streets
Buffalo, New York 14263

Roswell Park is an EOE/MFHV



**Public Announcement
regarding a
New Research Project on
Environmentally Friendly Technology
for the
Utilization of Reusable Metallic Materials Technology**

Announced by the New Energy and Industrial Technology
Development Organization on May 14, 1992

In order to promote the research of global environmental technology and industrial technologies, the New Energy and Industrial Technology Development Organization (NEDO) would like to inform all interested companies and research organizations regarding the research project described below. This new project is being undertaken as part of the Research and Development Program on Industrial Technology for Protection of the Global Environment and The National Research and Development Program of the Ministry of International Trade and Industry of Japan.

Theme of the Research Project

"Research of Environmentally Friendly Technology for the Utilization of Reusable Metallic Materials: Elemental and Comprehensive Process Research"

Outline of the Research Work to be Entrusted

This next generation steel production process project utilizing scrap metal which does not need reduction energy in iron processing is to be implemented in order to contribute to both the problem of the global environment and resource recycling. The elemental and comprehensive process research to be entrusted as part of this project includes research on elemental technologies for reclamation and melting processes for scrap metal and a total process and system for a next generation steel production process.

Procedures for Application

(1) Qualification Criteria

All companies or research organizations who meet the following qualification criteria may submit an application to participate in the project:

1. The applicant must have previous research and development experience in the field covered by or related to the project and possess the organizational structure, human resources and research facilities required to carry out the project work.
2. The applicant must be in sound financial condition and have the ability to manage its finances and facilities as necessary to smoothly carry out the project work.
3. The applicant must be able to comply with NEDO's instructions, if such are necessary, to fully carry out the project work.
4. The applicant must be willing to bear 25% of the total cost of any contract it is awarded under this project.
5. The applicant must have attended the explanatory meeting held by NEDO as set forth below or been represented at the meeting by a responsible agent or representative who is capable of accurately conveying the contents of the meeting in detail.

(2) Explanatory Meeting

An explanatory meeting will be held on the date shown below in order for NEDO to fully explain the details of the project research work to be entrusted and the application documents to be submitted. All companies or research organizations who are interested in submitting an application to participate in the project are required to attend this meeting or to send an agent or representative to attend on their behalf. Japanese will be the only language used during the meeting.

Date: Friday, May 29, 1992
Time: 14:00 to 15:00
Place: NEDO's Head Office
Sunshine 60 Building, 30th Floor, Room 30-01
1-1, Higashi-Ikebukuro 3-chome
Toshima-ku, Tokyo 170

(3) Further Information

For further information regarding the research work to be entrusted under the above project, please contact NEDO by telefax as follows:

New Energy and Industrial Technology
Development Organization
Contract Division, Accounting Department
Sunshine 60 Building, 28th Floor
1-1, Higashi-Ikebukuro 3-chome
Toshima-ku, Tokyo, 170 Japan
Telefax 03-5992-1184

ICAIR

Life Systems, Inc.

The ICAIR business group of Life Systems, Inc. is a leading consulting firm providing state-of-the-art support to various Federal/State agencies and private industries on issues related to chemical contaminants in the environment.

Principal Toxicologist

We seek individuals for the position of Principal Scientist, Toxicology, to support our growing contract base in Superfund hazardous waste site risk assessments, toxicological profiles of chemicals of concern, and other chemical-specific environmental and human health regulatory issues.

This nonlaboratory position will involve authorship of documents that include Agency for Toxic Substances and Disease Registry (ATSDR) toxicological profiles, USEPA Office of Water criteria documents and health advisories, and USEPA Superfund site human health risk assessments. Responsibilities include document preparation, literature search planning, search review, critical review of references, authorship of text, and calculation of regulatory or guidance values. Requires extensive experience in review and evaluation of toxicological and toxicokinetic studies, plus a thorough understanding of approaches and methods used by the USEPA and ATSDR.

A Ph.D. in toxicology or a related health science is necessary. A minimum of eight years of functional and specific experience as a toxicologist, health scientist, or environmental scientist working in a research and/or product development environment is required. This individual must be thoroughly familiar with methods used by federal agencies to perform qualitative and

quantitative exposure and toxicity analyses, both for cancer and noncancer effects.

Principal Risk Assessment/Health Scientist

We seek individuals for the position of Principal Risk Assessment/Health Scientist to support our growing contract base in U.S. Environmental Protection Agency (USEPA) Superfund hazardous waste site risk assessments, and other chemical-specific environmental and human health regulatory issues.

This nonlaboratory position will involve authorship of hazardous waste site risk assessments and health-based clean-up goal reports. The position demands an ability to plan and market new business activities to be performed under existing contracts, and to assist ICAIR senior management in the development of new business opportunities in the risk assessment area.

A Ph.D. or Masters degree in health science or environmental science is required. A minimum of eight years experience as a health scientist or environmental scientist, with at least three years direct experience working in the preparation of site-specific risk assessments and other regulatory health documents is also required. This individual must be thoroughly familiar with methods used by Federal agencies to perform qualitative and quantitative risk analyses, i.e., the USEPA Human Health risk Assessment Guidance for Superfund.

ICAIR provides a challenging, professional environment for career growth, and a strong work ethic that demands quality and productivity. Competitive salary and benefit options, plus an attractive location in suburban Cleveland, Ohio are offered for these positions. Send curriculum vitae, salary history, and writing samples to Manager, Personnel at: **ICAIR, Life Systems, Inc., 24755 Highpoint Road, Cleveland, Ohio 44122.** Equal opportunity employer. M/F/H/V.

Director Earth Sciences Division

Lawrence Berkeley Laboratory, a multi-disciplinary research and development center, funded by the U.S. Department of Energy is currently inviting applications for the position of Director, Earth Sciences Division.

The Director will coordinate a broad program of integrated research in geology, geophysics, geochemistry and hydrogeology, and will be responsible for developing interdisciplinary projects in such areas as the earth science aspects of environmental studies, petroleum reservoir engineering, nuclear waste disposal, and geothermal energy. The Earth Sciences Division has a staff of approximately 200, including 40 principal investigators and faculty scientists with an annual budget of over \$13M. The Division Director also participates in formulating the research policy and long-term direction of the Laboratory as a whole. The Director is expected to maintain a strong personal involvement in research.

This position requires a Ph.D. or equivalent in Earth Sciences or a related field, combined with a distinguished record of scientific achievement and program management. The candidate must have demonstrated capabilities in scientific leadership and must have strong management and administrative skills, creativity in decision making and problem solving and experience in human resource management.

The closing date for the submission of applications is July 30, 1992. Applicants must submit two copies of resume, salary history, and the names and addresses of three references to: **ESD Search Committee, Job H/7347, c/o Employment Office, Bldg. 90/1042, Lawrence Berkeley Laboratory, One Cyclotron Road, Berkeley, CA 94720.** An equal opportunity employer.



LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA
U.S. Department of Energy

POSITIONS OPEN

BACTERIAL GENETICIST

The Department of Microbiology, Immunology and Preventive Medicine, Iowa State University, is seeking applications for a tenure-track faculty position in Bacterial Genetics at the **ASSISTANT/ASSOCIATE PROFESSOR** level. We are seeking an individual with experience in a well-developed bacterial or bacteriophage genetic system. Applicants should possess a Ph.D. and have at least 2 years of postdoctoral experience, a strong record of research accomplishments and a demonstrated potential for developing an independent research program. Generous startup funds, laboratory space and state-of-the-art support services will be provided. Moderate teaching responsibilities will include participation in undergraduate and graduate level courses in bacterial genetics. Interested candidates should send curriculum vitae, a statement of future research plans, and the names of three references by 1 July 1992 or until the position is filled to: **Dr. F. Chris Minion, Chairman of the Bacterial Geneticist Search Committee, Veterinary Medical Research Institute, Iowa State University, Ames, IA 50011.**

CHAIR POSITION

Environmental Health Scientist/Department Chair, Department of Environmental Health, East Tennessee State University, academic year, tenure-track, **ASSOCIATE/FULL PROFESSOR**. Rank and salary commensurate with qualifications and experience. Fall 1992. Minimum qualifications include an earned doctorate in environmental health science with administrative experience in higher education and eligibility for certification by a related professional board. Preference will be given to an environmental toxicologist. Willingness to teach undergraduate and graduate students necessary. Evidence of strong established scholarly research activity related to toxicology of aquatic systems, as documented by refereed journal publications and a record of outstanding extramural grant support, required. Must lead and coordinate a department of seven faculty, 250 undergraduates and 80 graduate students in a variety of areas of concentration. Send current curriculum vitae, names, addresses, telephone numbers of five references, and documentation of current grant funding and research to: **Dr. Guy R. Lanza, Dean, School of Public and Allied Health, East Tennessee State University, Box 70,623, Johnson City, TN 37614-0623.** Review of applications will begin immediately and the process will continue until a suitable candidate is found. *An Equal Opportunity/Affirmative Action Employer.*

EXECUTIVE VICE PRESIDENT

Council for Agricultural Science and Technology (CAST). Available 1 July 1992, and located in our CAST office in Ames, Iowa. Responsibilities include serving as chief executive officer, member of the executive committee, organizing various task forces, editor-in-chief of CAST publications and responding to information requests. Applicants must have a Ph.D. or equivalent in food or agricultural science with 10 years of experience, interest and ability in writing and communicating information and an ability to administer a wide range of people and organizations. Contact: **CAST, 137 Lynn Avenue, Ames, IA 50010-7197, telephone: 515-292-2125.** Application deadline 1 June 1992 or until position is filled. *CAST is an Equal Opportunity Employer.*

RESEARCH POSITION IN ACADEMIC DEPARTMENT OF PATHOLOGY: STANFORD UNIVERSITY SCHOOL OF MEDICINE. The Department of Pathology at Stanford University School of Medicine seeks candidates for appointment at the level of **ASSISTANT or ASSOCIATE PROFESSOR**. Individuals must have an M.D. or combined M.D. and Ph.D. degrees and an established record of scholarly productivity. There also must be proof of scientific independence and the ability to obtain research funding. Of special interest are candidates with established credentials or promise as experimental pathologists. Preference will be given to individuals who can contribute to clinical service obligations in anatomic or clinical pathology. Applicants should send their curriculum vitae and names of references to: **Klaus G. Bensch, M.D., Professor and Chairman, Department of Pathology, Stanford University Medical School, Stanford University Medical Center, Stanford, CA 94305.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

POSITIONS OPEN

EXECUTIVE ADMINISTRATIVE POSITION
available immediately at a nonprofit teaching and scientific research institute. This position includes responsibility for the accounting office, financial reporting and overseeing business activities of the institute as well as responsibility for the physical plant and support staff. Applicants must have a Ph.D. degree with a background in the biological or chemical sciences and several years of experience in fiscal management. Please send curriculum vitae and the names, addresses and telephone numbers of three references to: **Box 18, SCIENCE, Room 814, 1333 H Street, NW, Washington, DC 20005.** *Equal Employment Opportunity/Affirmative Action.*

PRINCIPAL OFFICER AMERICAN RED CROSS BLOOD SERVICES/ATLANTA REGION

The Red Cross Blood Services in Atlanta is seeking a Principal Officer to manage the Blood Services with collections of 230,000 and a staff of 550. Qualified candidate must have an understanding of the scientific principles and techniques involved in the manufacture of biologics and thorough knowledge of pertinent regulatory provisions. M.D., with certification in hematology or pathology, eligible for licensure in Georgia preferred. Ph.D., bachelor's or other graduate degree if sufficient knowledge of pertinent disciplines. Five to 7 years of management/administrative experience in blood banking. Salary negotiable. Interested candidates may send résumés to:

**AMERICAN RED CROSS
BLOOD SERVICES/ATLANTA REGION
1955 MONROE DRIVE, NE
ATLANTA, GA 30324**
Equal Opportunity Employer M/F/H/V
ATTN: DIRECTOR, HUMAN RESOURCES

PROGRAM DIRECTOR NATIONAL RESEARCH INITIATIVE COMPETITIVE GRANTS PROGRAM, UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

The National Research Initiative Competitive Grants Program (NRICGP), U.S. Department of Agriculture, seeks a qualified scientist to serve as a Program Director for grant review and administration in the area of animal disease research. Candidates must have a D.V.M., Ph.D. or other degree with major study in microbiology, veterinary pathology, physiology, parasitology, virology, veterinary science or a related discipline of biological science. In addition, candidates must have specialized experience.

Closing date is 22 June 1992. For further information on this full-time, permanent position, contact: **Dr. Rosemary R. Grady, NRICGP, Room 323G Aerospace Building, 901 D Street, SW, Washington, DC 20250-2200; telephone: 202-401-6234.** For information on application procedures/forms, contact: **Ms. Kathy Amussen, Personnel Staffing Specialist; telephone: 202-720-9811.** *USDA is an Equal Opportunity Employer.*

TECHNICAL PROGRAM MANAGER

The Ames Laboratory, Iowa State University, is seeking a Scientific Technical Program Manager to assist with a national applied Research and Development program for characterization and monitoring of contaminated sites and facilities, hazardous and mixed wastes, and waste treatment processes being addressed by the U.S. Department of Energy, Office of Environmental Restoration and Waste Management. Position requires a Ph.D. (or M.S.) in environmental science, environmental engineering, chemistry, physics, or geochemistry plus at least 3 years (6 years with M.S.) of professional experience within the field of specialization. Candidates with direct experience in environmental science related to characterization, monitoring, and sensor technology are particularly encouraged to apply. Prior experience with regulatory agencies in this area is desirable. Salary: Commensurate with experience and education within the range of \$35,658 to \$60,003. Applicants should submit a résumé plus the names and addresses of three references to: **Ames Laboratory Personnel Office, 127 Spedding Hall, Iowa State University, Ames, IA 50011.** *An Equal Opportunity/Affirmative Action Employer M/F/V/H.*

OPPORTUNITIES IN PATHOLOGY AND TOXICOLOGY

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research and development, has the following exceptional opportunities for scientists in the Toxicology Department.

Associate Director Clinical Pathology and Safety Pharmacology

In this new senior position, the Associate Director will be responsible for the management of the clinical pathology section and the cardiovascular, renal, and respiratory pharmacology laboratories. The preferred candidate will have DVM and Ph.D. degrees with postgraduate training in clinical medicine, pharmacology, physiology or related disciplines and board certification in a veterinary clinical specialty. The Associate Director will provide innovative leadership to a multi-disciplinary team of biomedical scientists engaged in the clinical evaluation of animals receiving novel therapeutic agents. Excellent skills in the interpretation of clinical pathology data and pharmacokinetic and pharmacological data are expected. Refer to Code M042.

Veterinary Pathologist

The Veterinary Pathologist will have demonstrated ability in experimental pathology, with an MS or Ph.D., or through publication of scientific work. Participation in the design, conduct, and reporting of toxicity of studies is expected, as are collaborative interactions with research departments. Investigation of pathogenic mechanisms is emphasized. Individuals with expertise in cardiovascular disease are encouraged to apply. A background in toxicologic pathology and board certification by the American College of Veterinary Pathologists is preferred. Refer to Code M030.

Assistant Director-General Toxicology

In this new position, the Assistant Director will be responsible for planning, organizing, and directing the activities of the General Toxicology Unit, supervising technical staff, developing clinical strategies for evaluating new compounds, and serving as study director and project representative on development projects. Experience in clinical electrocardiography or ophthalmology is desired. Requirements include a DVM/Ph.D. and a minimum of five years of relevant experience in toxicology. Excellent managerial and effective communication skills are essential. Refer to Code M039.

Immunologist, Cellular Pathology

The scientist will conduct research in immunotoxicology to support our drug discovery and development activities. The focus of the work will be to evaluate the effect of pharmaceuticals, especially products derived from recombinant DNA technology and synthetic peptides, on lymphocyte, neutrophil and macrophage function. Experience in immune function evaluation of non-rodent species is highly desirable. This position is highly interactive, both inter- and intra-departmentally, and offers an opportunity for involvement in all phases in drug development. Qualifications include a Ph.D. in immunology or related field with experience using techniques of cellular immunology. Refer to Code M038.

Excellent oral and written communication skills, as well as strong interpersonal skills, are required for these positions. Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We provide a stimulating, rewarding work environment and a competitive compensation/benefits/relocation package. For confidential consideration, send your resume with the appropriate position code to **H.R. McConnell, Employment Administrator, P.O. Box 1539, King of Prussia, PA 19406.** *Equal Opportunity Employer, M/F/H/V.*

SB
SmithKline Beecham
Pharmaceuticals

POSITIONS OPEN

USDA/FOREST SERVICE

STATION DIRECTOR. Intermountain Forest Experiment Station position is located in Ogden, Utah. The position is responsible to the Chief of the Forest Service for providing leadership in the formulation and direction of research and scientific activities in natural resources. Responsibilities encompass the important forest areas consisting of the states of Idaho, Montana, Nevada, and Utah. This position is in the Senior Executive Service, salary range is \$90,000 to \$112,000 per annum. All applicants must submit: (1) application for federal employment (SF-171) typed, (2) Supplemental Applicant Statement, (3) copy of most recent supervisory appraisal of performance, (4) Senior Executive Candidate Development Program graduates must provide proof of OPM certification, (5) Form AD-779, Biographical Sketch. To obtain the application forms or if you have questions, please contact: **Denise Howell, 703-235-3440, USDA Forest Service, P.O. Box 96090 (Room 913 RPE), Washington, DC 20090-6090.**

MOLECULAR/CELL BIOLOGIST THE BEN MAY INSTITUTE THE UNIVERSITY OF CHICAGO

The Ben May Institute of the University of Chicago is seeking applicants for a junior or intermediate level **FACULTY POSITION.** We are developing a strong program in the molecular aspects of the control of cell growth and differentiation. We are seeking an outstanding individual who is using the approaches of molecular biology or cell physiology to examine basic mechanisms of cell signaling events or regulation of gene expression. Existing related research programs in the Ben May Institute include molecular and genetic aspects of receptor signaling mechanisms involving steroid hormone receptors, growth factor receptors, and T lymphocyte activation and regulation. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of three references should be sent to: **Dr. Frank Fitch, Director, Ben May Institute MC6027, THE UNIVERSITY OF CHICAGO, 5841 South Maryland Avenue, Chicago, IL 60637.** An Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN BIOMEDICAL SCIENCES

CREIGHTON UNIVERSITY SCHOOL OF MEDICINE, OMAHA, NEBRASKA. Tenure-track positions are available for faculty to join in the continuing development of the Department of Biomedical Sciences. Research includes the chemistry and biology of regulatory peptides and their receptors in the control of cardiovascular, pulmonary, gastrointestinal and renal functions, of bone growth and of cancer, comparative and developmental neuroscience, intracellular signaling and the molecular biology of collagen synthesis, globin gene expression and gene therapy. State-of-the-art equipment is available for this research. Productive research links exist with the clinical departments.

Areas of expansion include but are not limited to molecular biology and the role of proteinases in homeostasis. Applicants should welcome opportunities to collaborate with other faculty. Appointees will be expected to participate in courses to graduate and medical students in one or more of the following: biochemistry, molecular biology, cell biology, physiology, anatomy and neuroscience.

Application, curriculum vitae and addresses of referees should be sent to:

**Dr. Richard F. Murphy, Chairman
Department of Biomedical Sciences
School of Medicine
Creighton University
2500 California Street
Omaha, NE 68178**

Creighton University is an Equal Opportunity/Affirmative Action Employer and minority candidates are encouraged to apply.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

POSITIONS OPEN

POSTDOCTORAL POSITION for investigations on the molecular and biochemical properties of calmodulin-dependent nitric oxide synthases. Opportunities exist for collaborative research in a multidisciplinary training program involving structural analyses of regulatory domains to cellular modes of protein expression and regulation. Previous experience with recombinant DNA methodology desirable. Please address inquiries to: **James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040, telephone: 214-688-6849, FAX: 214-688-2974.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Immediate NIH-funded position available to study the role of intracellular calcium in signal transduction during activation of NaCl(K) cotransport in tracheal and nasal epithelial cells. The candidate will participate in a multidisciplinary research program in airway epithelial cell biology. Experience in optical and biochemical techniques preferred. Individuals with a Ph.D. degree in physiology, biochemistry, cell biology or related discipline are invited to submit curriculum vitae and three letters of reference to: **Carole M. Liedtke, Ph.D., Department of Pediatrics, Case Western Reserve University (CWRU), 2101 Adelbert Road, Cleveland, OH 44106. FAX: 216-844-5916.** CWRU is an Equal Opportunity/Affirmative Action Employer.

FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need. Write to:
**Science New Lab Service Department
1333 H Street, NW
Washington, DC 20005**

Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

HPLC

14 to 19 June 1992, Baltimore
Issue date: 5 June 1992

Protein Society

25 to 29 July 1992, San Diego
Issue date: 10 July 1992

Science Innovations

21 to 25 July 1992, San Francisco
Issue date: 17 July 1992

Electron Microscopy Society of Am.

17 to 20 August 1992, Boston
Issue date: 31 July 1992

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POSITIONS OPEN

ASSOCIATE POSTDOCTORAL POSITION

Applications are invited for a postdoctoral position as an associate to work in the laboratory of Dr. Stephen T. Warren, whose current research involves studies of simple repeat expansion mutations such as those responsible for the fragile X syndrome or myotonic dystrophy. Projects also include the molecular and biochemical characterization of the FMR-1 gene, gene product and regulation.

Qualified candidates should possess an M.D. or Ph.D. in genetics or biochemistry. Experience in molecular genetic techniques and/or a background in human genetics desired.

Please forward your curriculum vitae, three letters of recommendation and a brief statement of background/future goals to: **Dr. Stephen T. Warren, Emory University School of Medicine, 4035 Rollins Research Center, 1510 Clifton Road, NE, Atlanta, GA 30322.** An Equal Opportunity Employer.

CENTERS FOR DISEASE CONTROL (CDC) MALARIA BRANCH

The Division of Parasitic Diseases, Malaria Branch, National Center for Infectious Diseases, Centers for Disease Control, invites applications for a **VISITING POSTDOCTORAL** position. Available immediately to conduct research on the ribosomal RNA genes of malaria parasites. This position offers an opportunity to re-examine taxonomic relationship of human and nonhuman malaria parasites and develop a sensitive and specific malaria diagnostic technology. Initial appointment is for 1 year with possibility of extension. The salary range is \$21,000 to \$28,000, based on the candidate's qualification and experience. Interested candidates should send curriculum vitae and names of three references to: **Dr. Altaf A. Lal, Centers for Disease Control, 1600 Clifton Road, Mail Stop F-12, Atlanta, GA 30333. Telephone: 404-488-4079. FAX: 404-488-4427.** CDC is an Equal Employment Opportunity Employer and provides a smoke-free work environment.

POSTDOCTORAL POSITION to study structure/function relationships in bacterial sarcosine oxidase, a multisubunit enzyme using two different flavins and tetrahydrofolate as cofactors. The sarcosine oxidase operon has been cloned and overexpressed and contains genes for the enzyme's four different subunits. Applicants interested in enzymology and recombinant DNA technology are encouraged to send curriculum vitae and names of three references to: **Dr. Marilyn Jorns, Department of Biological Chemistry, Hahnemann University School of Medicine, Broad and Vine, Philadelphia, PA 19102.**

POSTDOCTORAL POSITION available for studying vesicle traffic using cell-free techniques. Research focus is on regulation of endocytosis and the role of GTP-binding proteins. Recent Ph.D. in biochemistry, cell biology, or related field required; background in receptor studies, protein purification, and/or molecular biology would be helpful. Send curriculum vitae and names of three references to: **Dr. Marianne Wessling-Resnick, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

THREE POSTDOCTORAL POSITIONS anticipated (subject to availability of funding) 2 October 1992, as part of the developing Nebraska Behavioral Biology Group, a cooperative effort of the University of Nebraska at Omaha (UNO), the University of Nebraska-Lincoln (UNL), and Creighton University (CU). Positions are available for scientists interested in working at the interface between neural mechanisms and behavior with a strong emphasis on functional considerations. Ph.D. in biology, psychology, or related field required. Applications from individuals working in any area that involves integrating mechanistic and functional approaches are welcome. Areas of special interest are: (1) Neuroendocrine function and reproduction (UNO); (2) insect neuroethology and communication (CU); (3) neural bases of cognitive functioning (UNL). Send curriculum vitae, copies of publications, and names, addresses and telephone numbers of three references postmarked by 6 July to: **Alan C. Kamil, Nebraska Behavioral Biology Group, Manter Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0118.** Affirmative Action/Equal Opportunity Employer.

**Department of Energy
Office of Energy Research
Special Research Grant Program Notice 92-14:
Human Genome Program—Ethical, Legal and Social Issues**

ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy hereby announces its interest in receiving applications for Special Research Grants in support of the Ethical, Legal, and Social Issues (ELSI) activities of the Human Genome Program (HGP). This Program is a coordinated multidisciplinary research effort aimed at developing creative, innovative resources and technologies which will lead to a detailed understanding of the human genome at the molecular level. This particular research notice encompasses research and conference grants that address ethical, legal, and social issues that may arise from applications of knowledge and materials resulting from the HGP. The DOE especially encourages the submission of applications to conduct multidisciplinary empirical research in the area of privacy as it pertains to genetic information. This may include (but is not limited to) issues of ownership and control of genetic information, consent to disclosure and use of genetic information, the impact on scientific collaboration and candor, and the role(s) of high performance computers in information management relevant to genetic data. Applications should demonstrate awareness of the relevant literature, and should include detailed plans for the development and analysis of factual information and the conduct of normative inquiry bearing on the ethical, legal, and social issues presented by applications of the knowledge gained from the HGP. All applications should include, where appropriate, detailed discussion of human subjects protection issues; e.g., storage of, manipulation of, and access to data. Where survey techniques are proposed, inclusion of women, minorities, and potentially disabled individuals must be noted and described, unless specific exclusions are scientifically necessary and justified in detail.

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will enhance public understanding of both the scientific aspects and the ethical, legal and social aspects of the HGP. In addition, DOE is encouraging conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. Educational and conference applications should also demonstrate awareness of the relevant literature, and include detailed plans for the accomplishment of project goals. In the case of educational activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of conferences, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required.

Before preparing a formal application, potential applicants are strongly encouraged to submit a preapplication in accordance with 10 CFR 600.10(d)(2), which consists of two to three pages of narrative describing the research objectives, methods of accomplishment, measures of accomplishment including anticipated products, and an estimated budget. These will be reviewed relative to the scope and research of the DOE's Human Genome Program ELSI activities. Preapplications referencing Program Notice 92-14 should be received by June 15, 1992, and sent to Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), U.S. Department of Energy, Washington, D.C. 20585. Telephone and FAX numbers are required parts of the preapplication. A response to the preapplication discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., August 7, 1992, to be accepted for merit review in October 1992 and to permit timely consideration for award in Fiscal Year 1993.

ADDRESSES: Formal applications referencing Program Notice 92-14 should be forwarded to: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, Room G-236, Washington, DC 20585, ATTN: Program Notice 92-14. The following address must be used when submitting applications by U.S. Postal Service Express, or any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

FOR FURTHER INFORMATION CONTACT: Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, DC 20585, (301) 903-6488.

SUPPLEMENTARY INFORMATION: The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research data and information, educational and training materials, and conference and meeting results. Funds to defray the costs of disseminating materials and results are allowable; however, such requests must be adequately justified. It is anticipated that approximately \$1.1 million will be available for grant awards during FY 1993, contingent upon availability of appropriated funds. Multiple year funding of grant awards is also contingent upon availability of funds. Previous awards have ranged from \$5 thousand per year to \$400 thousand per year (total costs) with terms from 1 to 3 years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the ER Application and Guide for the Special Research Grant Program and 10 CFR Part 605. The application kit and guide is available from the U.S. Department of Energy, Acquisition and Assistance Management Division, Office of Energy Research, ER-64, Washington, DC 20585. Telephone requests may be made by calling (301) 903-6488. Instructions for preparation of an application are included in the application kit. The Catalog of Federal Domestic Assistance number for this program is 81.049.

Issued in Washington, DC, on April 22, 1992.

D. D. Mayhew
Deputy Director for Management
Office of Energy Research

DIRECTOR INTEGRATED MICROSCOPY RESOURCE

THE UNIVERSITY OF WISCONSIN-MADISON invites applications for the position of Director of the Integrated Microscopy Resource (IMR). The appointment can be made either at the Associate/Full Professor level or at the Associate/Senior Scientist level, depending on the qualifications and preference of the candidate, and will begin on or after September 1, 1992. The IMR, a National Biotechnology Resource funded through the National Institutes of Health, provides specialized instrumentation for biomedical structural research, including a 1 MeV electron microscope, a low voltage scanning electron microscope, a high pressure rapid freezing unit for cryopreparation, advanced video-enhanced interference-based light microscopes, a confocal light microscope, a workstation computer for 3D visualization, and auxiliary equipment. The candidate's specific research area is open, but should involve development of instrumentation and preparative methods for application to fundamental biological or biomedical problems. Structural molecular, cell, or developmental biology are examples of appropriate additional research areas. The departmental home will depend upon the interests of the candidate. Teaching responsibilities will be developed through the departmental home. Applicants should submit a curriculum vitae, statement of research plan which explains how instrumentation technology research and development would contribute to their research program, and names of three references by **July 15, 1992** to:

Professor Ralph Albrecht, Co-Chair, Search Committee
University of Wisconsin-Madison
Laboratory of Molecular Biology
1525 Linden Drive
Madison, WI 53706

For further information, contact: Dr. Ralph Albrecht, Dept. of Animal Health and Biomedical Sciences, 1655 Linden Drive, Madison, WI 53706, 608-263-3952 or Dr. Thomas Kelly, Dept. of Materials Science and Engineering, 1500 Johnson Drive, Madison, WI 53706, 608-263-1073. The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer. In compliance with the University of Wisconsin open records requirements, names, titles and/or occupations, and addresses of applicants and nominees cannot be kept confidential.

RESEARCH INVESTIGATOR Toxicology

Join Sterling Winthrop and be part of a team dedicated to the enhancement of scientific discovery. Sterling Winthrop Pharmaceuticals Research Division is the worldwide pharmaceutical research and development organization of Sterling Winthrop Inc. We currently seek a Principal Research Scientist for the Drug Discovery Department of our Rensselaer, New York facility.

The Research Investigator will report to the Associate Research Director of Regulatory and Experimental Toxicology and will participate on Discovery and Development project teams regarding toxicologic evaluation of new agents and serve as Study Director on preclinical safety studies.

Requirements include a Ph.D. or D.V.M. in toxicology or related discipline, plus post-doctoral research experience and knowledge of GLP requirements.

At Sterling Winthrop, you'll enjoy a highly competitive salary and benefits package, including an attractive relocation program, and outstanding career opportunities. Our Rensselaer, NY facility will be relocating to a new state-of-the-art facility in Upper Providence Township, PA in approximately 1993. We invite you to share in the opportunities now and in the future. For confidential consideration, forward your resume and salary requirements to:



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Microbiologist/ Biochemical Engineer

Our Microbial Fermentation Group has an immediate opening for a proven professional to develop fermentation processes that optimize the production of biopharmaceuticals by recombinant bacteria. The successful candidate will have a PhD (0-2 years' related experience) or an MS (5+ years' related experience) in Microbiology, Biochemical Engineering or a related field. Working knowledge of current fermentation technology is required; understanding of bacterial physiology and/or molecular biology is desired.

For more information, please send resume and letter of interest to: Human Resources Department, Genetics Institute, Inc., One Burtt Road, Andover, MA 01810.

Genetics Institute is dedicated to building strength through diversity. We are an Affirmative Action Employer.

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GENETICS INSTITUTE



THE AARON DIAMOND FOUNDATION POSTDOCTORAL RESEARCH FELLOWSHIPS in the Biomedical and Social Sciences

AIDS OR DRUG ABUSE RESEARCH

The Aaron Diamond Foundation announces the availability of Postdoctoral Research Fellowships in the biomedical and social sciences focusing on AIDS or drug abuse. The purpose of the Fellowships is to attract promising investigators to academic and research institutions in New York City, and to encourage increased research into understanding and solving two of today's most pressing public health problems. The New York State Health Research Council, aided by a distinguished group of scientists comprising The Aaron Diamond Foundation Fellowship Selection Committee, administers the Fellowship Program.

STIPENDS

Fellows are paid annual stipends beginning at \$36,000. Each Fellowship is for two years, with an option for a third year.

ELIGIBILITY

Applicants should have received an MD or PhD within the past seven years. MD's should have completed at least two years of clinical training. PhD's are eligible immediately after graduation or after limited research experience.

The Fellowships are open to U.S. citizens and permanent residents. Women and members of minority groups are especially encouraged to apply.

MENTORS

A potential Fellow must be sponsored by a Mentor at a New York City institution. Mentors who have already expressed interest in participating in the Fellowship Program are listed in the application materials. The Mentor's institution receives \$30,000 annually to cover the Fellow's research costs, travel, tuition and fringe benefits.

APPLICATION DEADLINES

July 31, 1992 and July 30, 1993

INFORMATION AND APPLICATION FORMS

Ellen L. Rautenberg, Program Director, The Aaron Diamond Foundation
Postdoctoral Research Fellowships, New York State Health Research
Council, 5 Penn Plaza, Room 308, New York, NY 10001
(212) 613-2525



Do more than just make a living. Make living better for everyone.

Our proprietary ACCELL™ gene delivery systems are now being applied toward many diverse areas of biomedical development including novel human therapeutics for the treatment of cancer and AIDS, as well as the production of improved transgenic livestock. So, if you're looking for the opportunity to explore and develop new biomedical applications to improve the quality of life on a global scale, Agracetus is the outlet for your skill and expertise.

Research Scientists/ Postdoctoral Fellows

You should hold a Ph.D. degree and have demonstrated experience in mammalian gene transfer, gene therapy, vector construction, mammalian physiology, somatic cell and biochemical genetics, or broadly related areas of research. Any previous postdoctoral experience would be to your advantage. You will initiate new research projects in collaboration with ongoing programs in mammalian genetic modification.

Research Assistants

You should hold a B.S. or M.S. degree in addition to being capable in one or more of these areas: cell biology, molecular biology, immunology, cytogenetics, analysis of gene expression in transfected mammalian cells or transgenic animals. You will be part of highly interactive research teams in the application of mammalian gene transfer technology.

We're a state-of-the-art facility located near the University of Wisconsin. We offer an outstanding salary and benefits package. Please send your resume to: Vice President of Research, Agracetus, Inc., 8520 University Green, Middleton, WI 53562. An equal opportunity employer.



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The Wellcome Trust
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and the
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of the
National Institutes of Health
Announce the Availability of the

Hitchings-Elion Fellowships

in the Biomedical and Behavioral
Sciences

*For U.S. Postdoctoral Scientists who would
like 2 years of study in the United Kingdom
plus 1 year in the United States*

The Hitchings-Elion Fellowships will provide support for U.S. scientists (U.S. citizens or permanent residents) early in their careers who have held their most recent doctoral degree less than ten years. The purpose of the fellowships is to promote scientific collaboration in basic or clinical research between British and U.S. scientists. They will be awarded to support two years of collaborative research at the sponsor's laboratory in the United Kingdom and a third year at a sponsor's laboratory in the U.S.A. The Wellcome Trust will provide the financial support (between £13,661 and £20,868 annually, depending on experience) for the first two years, £5,000 per year for research expenses in the U.K. and round trip economy class air fare for the fellow and up to three dependents. The Wellcome Trust also will provide an equivalent stipend in U.S. dollars for the third year. The Burroughs-Wellcome Fund will provide \$7,500 for research expenses in the U.S.A. There are three application deadlines each year: January 10, May 10, and September 10 beginning in 1992. Applications will be received at the National Institutes of Health where the initial review process will be conducted. Funding decisions will be announced by the Wellcome Trust approximately six months from the application receipt date.

Those interested in obtaining more information on this new program, the scientific review process or an application kit, may contact:

**International Research and Awards Branch
Fogarty International Center
National Institutes of Health
Building 31, Room B2C39
9000 Rockville Pike
Bethesda, MD 20892
Telephone: (301) 496-1653
Fax: (301) 402-0779**

Those having questions regarding the fellowship stipends or the administration of the scheme in the United Kingdom should contact:

**Hitchings-Elion Fellowships
The Wellcome Trust
One Park Square West
London NW1 4LJ
United Kingdom
Telephone: 071-486-4902
Fax: 071-487-4915**

HUMAN GENOME '92

14–17 October 1992 ✧ The Acropolis ✧ Nice, France

Sponsored by The Human Genome Organisation and *Science* Magazine

Join your colleagues from around the world as they meet on the balmy Mediterranean coast to explore the latest developments in human genome research.

Don't miss **Human Genome '92**, the fourth annual conference on the Human Genome Project sponsored by the Human

Genome Organisation and *Science* magazine (published by the American Association for the Advancement of Science).

After three years in San Diego, the conference is moving to beautiful Nice, France; great discounts on unrestricted air fares are available. For details, use the coupon below.

Tentative Program

Mapping

(Thursday, 15 October, 8:30am–noon)

Bertrand R. Jordan (chair), *INSERM-CNRS*

Jean Weissenbach, *CNRS, Inst. Pasteur*

Daniel Cohen, *Ctr. d'Etude du Polymorphisme Humain*

Malcolm Ferguson-Smith, *Cambridge Univ.*

Cassandra L. Smith, *Univ. of California, Berkeley*

Yoshihide Hayashizaki, *Natl. Cardiovascular Research Inst.*

Human Genetic Diversity

(Thursday, 15 October, 4:00pm–7:00pm)

P. Fasella (chair), *Comm. of European Communities*

L.L. Cavalli-Sforza, *Stanford Univ.*

A. Piazza, *Univ. of Torino*

Alec J. Jeffreys, *Univ. of Leicester*

Kenneth Kidd, *Yale Univ. School of Medicine*

Svante Paabo, *Univ. of Munich*

Julia Bodmer, *Imperial Cancer Research Fund*

Applications of the Human Genome Project

(Friday, 16 October, 8:30am–noon)

Jean Dausset (chair), *Ctr. d'Etude du Polymorphisme Humain*

John Hardy, *St. Mary's Hospital Medical School*

Francis Collins, *Univ. of Michigan*

Yusuke Nakamura, *Japanese Fdn. for Cancer Research*

Hans-Hilger Ropers, *Univ. of Nijmegen*

Ulf Landegren, *Univ. of Uppsala*

Contributed Papers

(Friday, 16 October, 4:00pm–7:30pm)

Howard M. Cann (chair), *Ctr. d'Etude du Polymorphisme Humain*

Speakers will be chosen from poster session abstracts.

Model Organisms

(Saturday, 17 October, 8:30am–noon)

George Carle (chair), *Univ. of Nice*

Marc van Montagu, *Univ. of Ghent*

Piotr Slonimski, *CNRS*

John Sulston, *MRC Lab of Molecular Biology*

Steven Tanksley, *Cornell Univ.*

Eric Lander, *Whitehead Inst.*

Michael Ashburner, *Cambridge Univ.*

cDNA Sequences & Intellectual Property

(Saturday, 17 October, 4:00pm–7:30pm)

Lennart Philipson (chair), *EMBL*

J. Craig Venter, *Natl. Inst. of Health*

Kenichi Matsubara, *Osaka Univ.*

Rebecca Eisenberg, *Univ. of Michigan*

Charles Auffray, *Inst. d'Embryologie du CNRS*

Andrei Mirzabekov, *Soviet Academy of Sciences*

Plus...

Poster sessions

Exhibits

Social functions

Networking opportunities

and more

Program organized by:

Walter Bodmer, *Imperial Cancer Research Fund*

Charles R. Cantor, *DOE Human Genome Project*

Jean-Louis Mandel, *CNRS/LGME, INSERM*

- ☐ Please send me additional information about the **Human Genome '92** scientific program.
- ☐ I'm interested in exhibiting. Send an exhibit prospectus.
- ☐ Please send details about presenting a poster.

Name _____

Institution _____

Address _____

City/state _____

Zip/country _____

Phone _____

Fax _____

Send to: AAAS Meetings, 1333 H Street, NW, Washington, DC 20005, USA (Tel: 202-326-6461; Fax: 202-289-4021)

H3

***D*irector of Clinical Research**

A focus for progress in cancer research

The Royal Marsden Hospital lies at the heart of progress in cancer research. Together with the Institute of Cancer Research, we form the largest Comprehensive Cancer Centre in Western Europe and jointly wish to appoint a Director of Clinical Research.

You will establish and implement a strategy which unites the clinical research activities of our Centre and provides a focus for future progress in cancer research. Liaising closely with the Institute's Director of Research, you will ensure that the outcomes of basic science are brought into clinical practice.

To further our research aims, you must be capable of finding and obtaining funds for vital projects and of carefully managing resources.

Reporting directly to the General Manager of the Hospital Special Health Authority and the Chief Executive of the Institute, you will serve on the governing and executive management bodies of both organisations.

You will lead clinicians, scientists and other professionals, many of whom are at

the forefront of their fields, and since the clinical practice within the Hospital is integral to the research process, you will have important responsibilities in clinical management.

This unique role calls for an individual of international stature in clinical research in the cancer field. You should have substantial and successful experience of research, leadership and a career which demonstrates vision and strategic thinking.

The salary and conditions of service will be commensurate with the scope and importance of this exceptional post.

Please submit your cv with the names of 3 referees in confidence to: Miss P. M. Cunningham, General Manager, The Royal Marsden Hospital Special Health Authority, Fulham Road, London SW3 6JJ.

Further information may be obtained from Mrs M.R. Watts, Director of Personnel, at the above address, or telephone 071-352 8171 extn 2140.

Committed to equal opportunities in employment.

As the largest Comprehensive Cancer Centre in Western Europe, the Royal Marsden Hospital and The Institute of Cancer Research together employ some 2,000 staff and have an annual revenue budget of £66m. The Hospital has 340 beds and its principal source of funding is from the government. The Institute of Cancer Research's main source of funding is the Cancer Research Campaign, with which its work is closely linked.

The Royal Marsden Hospital is based on two sites, with the Institute of Cancer Research laboratories within or alongside the Hospital. Major redevelopments are about to open in the Hospital and a development programme is currently being considered in the Institute.



THE ROYAL MARSDEN HOSPITAL
and
THE INSTITUTE OF CANCER RESEARCH

SENIOR RESEARCH MOLECULAR BIOLOGIST & SENIOR RESEARCH BIOLOGIST

The Department of Cellular and Molecular Biology at Merck Research Laboratories in Rahway has two openings for highly motivated scientists with broad biological backgrounds interested in pursuing careers in drug discovery. Applicants should have a Ph.D., D.V.M. or M.D. degree and at least 3 years post-doctoral experience. Current programs in the department include research in reproductive biology, immunology, virology and vaccines.

Senior Research Molecular Biologist – The successful candidate will be involved in the application of state-of-the-art molecular and cellular biological tools to ongoing new therapeutic targets and studies of gene expression. Responsibilities will include gene cloning, expression of proteins in mammalian cells and analysis of function.

Senior Research Biologist – The successful candidate will utilize whole animal and cellular biology to establish models of normal and disease processes. The candidate will integrate these model systems with existing departmental expertise in molecular and cellular biology and protein chemistry. Experience in reproductive biology is preferred.

Candidates should have a demonstrated ability to find creative solutions to a broad range of biological problems. Excellent communications abilities and interpersonal skills are essential.

Please send curriculum vitae with cover letter and the names of three references to **Ms. Susan Jenkins, R80-A3, Merck Research Laboratories, AD #119, P.O. Box 2000, Rahway, NJ 07065.** An EEO/AA/VH Employer.



POSITIONS OPEN

POSTDOCTORAL POSITION available to study intracellular signals in exocrine secretory cells. Proposed areas of study include measurement of whole cell currents, microfluorimetry of $[Ca^{2+}]_i$, and flash photolysis of caged compounds. Applicants with experience of patch-clamp measurements of whole cell currents are particularly encouraged to apply to: **Dr. Trevor Shuttleworth, Department of Physiology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642-8642. FAX: 716-461-3259.**

POSTDOCTORAL IMMUNOLOGY POSITIONS. Available to study mechanisms of receptor-initiated lymphocyte activation. Special focus on signal transduction and regulation of gene expression in T lymphocytes and natural killer cells. Opportunities available in the laboratories of Drs. David J. McKean, Robert T. Abraham and Paul J. Leibson. Please send curriculum vitae, statement of background and goals, and three references to: **Paul J. Leibson, M.D., Ph.D., Department of Immunology, Mayo Clinic, Rochester, MN 55905.** Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION is available July 1992 to study the proteolytic processing of the Alzheimer's amyloid β -protein precursor. Investigations will also focus on the functional properties of protease nexin-2, the isoform of amyloid β -protein precursor that contains a Kunitz-type protease inhibitor domain. A Ph.D. in biochemistry or a related field required with experience in protein purification, enzyme assays, and cell cultures. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. William E. Van Nostrand, Department of Microbiology and Molecular Genetics, College of Medicine, University of California, Irvine, CA 92717; telephone: 714-725-2556.**

An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS are available immediately to investigate the role of growth factors in reproductive tissue. Ph.D. required, experience in cell culture, molecular biology, in vitro fertilization, or preimplantation genetics would be helpful but is not mandatory. Send application and three letters of recommendation to: **N. Chegini, Ph.D., and R. S. Williams, M.D., Department of Ob/Gyn, University of Florida, P.O. Box 100294, Gainesville, FL 32610.** Equal Opportunity Employer.

POSTDOCTORAL POSITION in applied superconductivity and biomagnetism.

The Biophysics Group at Los Alamos National Laboratory has a postdoctoral opening in applied superconductivity with specialization in the design and construction of large array biomagnetic sensor systems using SQUID technology and superconductor imaging surfaces. Experimentalists with skills in cryogenic techniques, superconducting electronics, and/or the detection of weak magnetic fields are encouraged to apply. Candidates must have received their Ph.D. in applied superconductivity, low-temperature physics, superconducting electronics or equivalent, no longer than 3 years prior to the starting date of the appointment. To formally apply, please send résumé, employment application, three letters of reference and graduate and undergraduate transcripts to: **Mary Anne With (MS P280), Human Resources Development Division PD-92-102, Los Alamos National Laboratory, Los Alamos, NM 87545.** Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy Security Clearance.

POSTDOCTORAL POSITION immediately available for investigating the cellular and molecular biology of genes in tumor progression of leukemias and lymphomas. Research involves genomic, cDNA cloning of novel genes and their variants, analysis and characterization of gene structure, regulation of gene expression, studies on the protein products, transfection into hematopoietic and nonhematopoietic cells. Send curriculum vitae and names of three references to: **Dr. Charlotte E. Gauerker, Jefferson Cancer Institute, Bluebell Life Sciences Building, Room 1006, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. FAX: 215-923-2117.** Thomas Jefferson University is an Equal Opportunity Employer. Women and minorities are especially encouraged to apply.



Pharmaceutical
Division

Opportunities in Medicinal Chemistry

The Miles Research Center (MRC) in West Haven is the U.S. pharmaceutical research arm of Miles Inc., Pittsburgh. Located on a campus-like setting near the Long Island Sound, the MRC is being developed into a world-class research complex.

Building from a strong molecular biological foundation, the MRC is currently expanding its Institute for Chemistry with the goal of becoming a leader in the pharmaceutical industry. Our new laboratories provide opportunities for chemists to participate in interactive drug discovery programs involving structural chemists, molecular modelers, biologists, and pharmacologists targeting rheumatic and metabolic disorders. Join us to be a part of the team.

Miles Research Center offers highly attractive compensation commensurate with qualifications and a benefits package including 401(k) and relocation assistance. These positions and the research environment in our new West Haven facility allow for a professional working environment conducive to career development. **For immediate and confidential consideration, please submit your resume including salary history to: Dept. CC-CHEM, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.** An Equal Opportunity Employer M/F/H/V.

PEPTIDE CHEMIST, PHD

Qualifications include a PhD in organic chemistry coupled with 2-4 years of relevant postdoctoral or industrial experience. A strong background in peptide and peptidomimetic synthesis (solid phase, solution), modern chromatographic, spectroscopic and analytical methods of peptide characterization are required.

RESEARCH ASSOCIATES, MS,BS

We are seeking scientists with a strong synthetic background and a broad knowledge of chromatographic and modern spectral methods. Responsibilities will include conducting multistep synthesis and documenting this activity with systematic record keeping. Candidates should have a proven ability to work independently and communicate effectively.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately in the Center for Molecular and Behavioral Neuroscience of the Universidad Central del-Caribe (UCC). Electrophysiological and molecular biology techniques will be used to study function and modulation of synaptic receptors. Send curriculum vitae and names of two references to: **Professor Vesna A. Eterović, Universidad Central del Caribe, P.O. Box 60-327, Bayamon, P.R. 00960-6032 or FAX: 809-740-4300. UCC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY. Available 1 May 1992 to assume primary responsibility for the isolation and characterization of the gene(s) that code(s) for a plant-specific trypsin inhibitor. Experience in plant molecular biology preferred. Send curriculum vitae and names of three references to: **Dr. Roxanne M. Broadway, Department of Entomology, New York State Agricultural Experiment Station, Cornell University, Geneva, NY 14456.**

POSTDOCTORAL POSITION. Available immediately in virus assembly. Biochemical and recombinant DNA techniques will be used to study replication, recombination and genomic packaging of dsRNA phage. [See *J. Virol.* 66, 2605, 2611 (1992); *Proc. Nat. Acad. Sci. U.S.A.* 87, 9173 (1990).] Send résumé and references to: **Dr. Leonard Mindich, Public Health Research Institute, 455 First Avenue, New York, NY 10024.**

POSTDOCTORAL POSITION available at the Public Health Research Institute in New York City to study the molecular structure and function of enzymes of the arginine biosynthetic pathway. Candidates should be recent Ph.D. graduates in biochemistry, molecular biology or a related field with a strong interest in protein molecular structure and function. Send curriculum vitae and names of three references to: **Dr. Carol J. Lusty, Department of Molecular Genetics, Public Health Research Institute, 455 First Avenue, New York, NY 10016.**

TWO POSTDOCTORAL POSITIONS. Available immediately to study the molecular genetics of cataracts. First project involves the use of positional cloning to isolate a mouse cataract gene. The second involves cloning a human cataract gene based on available protein sequence. Please send curriculum vitae and three references to: **Dr. Dwight Stambolian, University of Pennsylvania, School of Medicine, Department of Human Genetics, Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104.**

POSTDOCTORAL FELLOWSHIPS BOSTON BIOMEDICAL RESEARCH INSTITUTE

Several positions are available in the Department of Muscle Research to study regulatory mechanisms in muscle using a combination of site-directed mutagenesis, spectroscopy and biochemistry. Experience in muscle research and recombinant DNA preferred but not required. Interested candidates should send their curriculum vitae to: **Dr. Terence Tao, Department of Muscle Research, Boston Biomedical Research Institute, 20 Staniford Street, Boston, MA 02114. Boston Biomedical Research Institute is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW

A position is available to study the structure/function relationships of Ca^{2+} /calmodulin-dependent myosin light chain kinases. Experimental approaches include site-directed mutagenesis and construction of chimeric kinases to characterize functional domains. Additional opportunities exist for collaborative research in a multidisciplinary training program involving characterization of the biological roles of myosin light chain kinases in cells to analyses of the three-dimensional structures of these enzymes. Previous experience with recombinant DNA methodology is desirable. Please address inquiries to: **James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. Telephone: 214-688-6849, FAX: 214-688-2974. An Affirmative Action/Equal Opportunity Employer.**



Astra is the largest pharmaceutical company in the Nordic region. Astra's research and manufacturing operations are concentrated mostly in Sweden, while markets outside Sweden account for more than 80 percent of sales.

Astra Hässle in Göteborg is a research company with 800 employees. Research is aimed at new pharmaceuticals in the field of cardiovascular and gastrointestinal diseases.

Seloken[®] (metoprolol), Plendil[®] (felodipine) and Losec[®] (omeprazole) are new drugs from Astra Hässle.

Computational Chemist

At the Departments of Medicinal Chemistry our research is project oriented, and our main goal is the design and synthesis of biologically active compounds for the development of new and therapeutically improved drugs.

We are now looking for a Ph.D. chemist for our Computational Chemistry group. You will be working independently within the group on structure-biological activity relationships in our projects, in close cooperation with synthetic organic chemists, pharmacologists, biologists, and biochemists.

Your qualifications should include a Ph.D. (or its equivalent) in an area of physical organic chemistry. Experience with relating biological activity to molecular structure and with molecular modeling are advantages. It is essential that you are interested in working in a multidisciplinary environment.

For more information, please contact:

Bob Carter phone: +46 31 776 16 21 or

Bertil Samuelsson phone: +46 31 776 13 50.

Applications should be sent not later than 7 June to:

Astra Hässle AB, att: Victoria Barkby

S-431 83 MÖLNDAL, SWEDEN



POSTDOCTORAL POSITIONS IN CELLULAR AND MOLECULAR NEUROBIOLOGY



La Jolla, California

The newly established Department of Neurobiology has 5 postdoctoral positions available to study various aspects of molecular, cellular and developmental neurobiology. Major areas of interest are cell-cell and cell-substratum adhesion molecules, neurite outgrowth, and nerve regeneration. Specific studies include: analysis of morphogenetic pathways during neural development; identification of signal transduction pathways activated by adhesion molecule binding; control of expression of adhesion molecules, particularly by pattern-forming genes such as *hox* and *pax*; studies of over-expression or deletion of adhesion molecules in transgenic mice; characterization of new neural adhesion molecules; studies of diffusible signals such as nitric oxide in brain development; relationship between cytoskeletal states and control of cell shape and mitogenesis; theoretical analysis of reentrant pathways in the brain. Requires a strong background in cellular and/or molecular biology and biochemistry. Send CV and 3 letters of reference to: Dr. Gerald M. Edelman, Dept. of Neurobiology, The Scripps Research Institute, 10666 North Torrey Pines Rd., MB12, La Jolla, CA 92037. AA/EOE.



The recent opening of the new Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, NC, represents Glaxo's continued commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. Scientists engaged in Glaxo's expanding research and development programs at the Center have a premier facility in which to work.

The expansion of our **Structural and Biophysical Chemistry Department** has created an immediate opening for the following individual.

POSTDOCTORAL FELLOW Protein Crystallography

While working closely with both the Protein Purification and Crystallography Groups, the selected individual will be involved in the structural studies of membrane associated enzymes. Previous experience in either expression and purification of membrane bound proteins, or protein crystallography is required.

Our state-of-the-art crystallography facilities include a crystallization robot, two rotating anode generators, a Siemens area detector, ESV graphics workstations and access to a Cray Y-MP at the nearby North Carolina Super Computer Center. In addition, we are adding a Rigaku image plate detector in the near future.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork, and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume and salary history to: **Human Resources Department, Job #9141-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

The Division of Surgical Research in the Research Institute at The Hospital for Sick Children is seeking a:

POSTDOCTORAL FELLOW

The Department of Surgery and the Research Institute at The Hospital For Sick Children have established a two-year Transplantation Immunology Fellowship to provide M.D.'s with intensive research training in molecular and cellular immunology. Fellows will work full-time in one of two well-funded laboratories in the Division of Surgical Research and use current molecular genetic, flow cytometric, transgenic and biochemical techniques to study the control of antigen recognition and T lymphocyte function. The Research Institute at The Hospital For Sick Children is the largest paediatric research institute in Canada with over 150 principal investigators and 200 trainees conducting vigorous research in areas including cell biology, genetics, immunology, cancer biology, cardiovascular and molecular biology. Fellows will participate in monthly Transplantation Immunology conferences as well as many of the Institute seminar programs. The aim of the program is to develop technical expertise and scientific independence among physicians who have an interest in transplantation biology and medicine.

Applicants should have an M.D. degree and a strong commitment to basic research. Medical graduates with clinical training in all areas are welcome, and those trained in all areas of surgery are particularly encouraged to apply. Canadian Citizenship preferred but not required. The fellowship period can begin any time in 1992. Interested applicants should send their C.V., and ensure that three letters of recommendation are sent to: **Transplantation Immunology Fellowship Program, Division of Surgical Research, The Hospital For Sick Children, 555 University Avenue, Toronto, Ontario, Canada M5G 1X8.**



THE HOSPITAL FOR SICK CHILDREN

**Department of Energy
Office of Energy Research
Special Research Grant Program Notice 92-13:
Human Genome Program—Technological Advances**

ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy hereby announces its interest in receiving applications for Special Research Grants in support of the Human Genome Program. This Program is a coordinated multidisciplinary research effort aimed at developing creative, innovative resources and technologies which will lead to a detailed understanding of the human genome at the molecular level. Several research goals are encompassed in this notice: (1) Research will be supported for development and implementation of automated chromosome mapping technologies and advanced DNA sequencing technologies, specifically, innovative instrumentation and automated systems that offer the potential for rapid, cost-effective sequencing of a million bases per day, which includes non-gel techniques and direct imaging approaches; (2) Research will be supported to develop software for applied genome informatics for use in DNA mapping and sequencing. Such work includes information retrieval, user interfaces including interfaces compatible with Genome Data Base (GDB), databases, communications, algorithms, software engineering, and data management. Also desired are improved algorithms and hardware for analyzing DNA sequences, including identification of homologies, regulatory sites, and protein coding regions.

Before preparing a formal application, potential applicants are encouraged to submit a brief preapplication in accordance with 10 CFR 600.10(d)(2), which consists of two to three pages of narrative describing the research project objectives and methods of accomplishment. These will be reviewed relative to the scope and research needs of the DOE Human Genome Program. Preapplications referencing Program Notice 92-13 should be received by June 15, 1992, and sent to Dr. David A. Smith, Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585, (301) 903-6488. Telephone and telefax numbers are required parts of the preapplication. A response to the preapplication discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., August 7, 1992, to be accepted for merit review in October 1992 and to permit timely consideration for award in Fiscal Year 1993.

ADDRESS: Formal applications referencing Program Notice 92-13 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64, Room G-236, Washington, DC 20585, ATTN: Program Notice 92-13. The following address must be used when submitting applications by U.S. Postal Service Express, any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

FOR FURTHER INFORMATION CONTACT: Dr. David A. Smith, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, DC 20585, (301) 903-6488.

SUPPLEMENTARY INFORMATION: It is anticipated that approximately \$2.2 M will be available for grant awards during FY 1993, contingent upon the availability of appropriated funds. Multiple year funding of grant awards is expected, and is also contingent upon availability of funds. Previous awards have ranged from \$79 thousand per year up to \$1 million per year (total costs) with terms from 1 to 3 years. Most awards are in the \$200 thousand to \$400 thousand per year (total costs) range for 3 years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the ER Application and Guide for the Special Research Grants Program and 10 CFR Part 605. The OER, as part of its grant regulations, requires at 10 CFR 605.11(b) that a grantee funded by OER and performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health "Guidelines for Research Involving Recombinant DNA Molecules" (51 FR 16958, May 7, 1986), or such later revision of those guidelines as may be published in the Federal Register. The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research data and materials which may include, where appropriate, putting cell lines, probes, sequence data, etc., into public repositories. Funds to defray the costs of disseminating materials or submitting data to repositories are allowable; however, such requests must be adequately justified.

The application kit and guide is available from the U.S. Department of Energy, Acquisition and Assistance Management Division, Office of Energy Research, ER-64, Washington, DC 20585. Telephone requests may be made by calling (301) 903-6488 or FTS (301) 903-6488. Instructions for preparation of an application are included in the application kit. The Catalog of Federal Domestic Assistance Number for this program is 81.049.

Issued in Washington, DC on April 24, 1992.

D. D. Mayhew
Deputy Director for Management
Office of Energy Research

We are a **Large Pharmaceutical Company** situated in the **Paris Region**, dedicated to the discovery of new drugs. We have a position available in the **Division of Cellular and Molecular Biology** for :

Pharmacologist

(PH D)

The applicant should have **post doctoral experience in Binding assays and in situ Hybridization Techniques.**

The candidate should show creativity, initiative and qualities which will help him/her to work in a research team.

To be considered for this position, submit **a hand written letter**, CV and photo to Média-System, 6 impasse des Deux Cousins, 75849 Paris Cedex 17, quoting ref. 32487 on the envelope.

MÉDIA-SYSTEM

Research Scientist Pharmacokinetics

American Cyanamid's Medical Research Division is currently seeking a Research Scientist to become part of a research and development team in Pharmacokinetics.

The successful candidate will design, conduct, analyze and report pharmacokinetic and pharmacodynamic studies essential to the registration of new drug entities. Your responsibilities will include the establishment of appropriate *in vitro* and *in vivo* models, and coordination of research activities with other areas of the Medical Research Division.

A Ph.D. (or equivalent), training in pharmacokinetics, and two to four years' experience are required. Excellent oral and written communication skills are also essential.

Located at the Lederle Laboratories campus of American Cyanamid in Pearl River, New York, just 20 miles north of New York City, you will enjoy a competitive salary and liberal fringe benefits including a 401 (k) savings plan. For consideration, we invite you to submit your resume with salary history, in confidence, to: Professional Employment Office, Dept. J.K., Lederle Laboratories, N. Middletown Road, Pearl River, NY 10965.

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Biochemistry

Opportunities with Monsanto Company

Senior Research Scientist

Today's Monsanto is a company with an exciting future in high-value, high-performance products. This is an opportunity to be a part of the GlycoSciences Discovery Group, currently working in the area of inflammation, at Monsanto Corporate Research Laboratories.

You will investigate the use of glycosyltransferases and related enzymes for the synthesis and modeling of oligosaccharides and glycoproteins.

You must be an enzymologist with substantial research experience at the post-doctoral level, or above, in a variety of related areas including protein isolation, enzyme kinetics and enzyme immobilization. You will contribute strongly to the existing program and will be expected to initiate and develop future research projects.

Excellent salaries and benefits combine with the resources of a multi-billion dollar company and state-of-the-art research facilities to make this opportunity exceptionally attractive.

Please send your résumé with three references to: Monsanto Company, Mail Zone BB5B-GJ, 700 Chesterfield Village Parkway, St. Louis, MO 63198. An equal opportunity employer.

*Opportunity.
We've got it down to a science.*

Monsanto

ONCOLOGY DRUG DISCOVERY MD/Ph.D.

The Bristol-Myers Squibb Pharmaceutical Research Institute is at the forefront of oncological research in drug discovery and continues to expand its intensive efforts in this area. Under the direction of Dr. Bernd Seizinger, several positions are available at our Princeton, New Jersey facility.

Qualified candidates will have experience in molecular genetics and/or cell biology. Research will involve elucidating normal and aberrant function of tumor suppressor genes in the mammalian cell such as interactions with other cancer-related and growth-related genes and proteins, regulation by growth-control genes, etc. Creativity and the ability to work independently are necessary attributes. An excellent publication record is required.

A comprehensive benefits package and competitive salary will be offered. Individuals who possess MD or Ph.D. degrees should forward their resume to: **BRISTOL-MYERS SQUIBB PHARMACEUTICAL RESEARCH INSTITUTE, Human Resources Department 323-BM, P.O. Box 4000, Princeton, NJ 08543-4000.** We are an equal opportunity employer, M/F/D/V.



Bristol-Myers Squibb Company

WE HAVE A 104-YEAR TRACK RECORD OF NEW DRUG DISCOVERIES.

For more than a century, Abbott has been committed to improving the quality of human life through the development of new pharmaceutical products. Today, you could apply your expertise to our current drug discovery efforts within our Pharmaceutical Products Division.

CELL BIOLOGIST

As part of a drug discovery team, you will participate in research relating to the overexpression of recombinant proteins in mammalian and insect cells, the establishment of primary cultures from various tissues, and the large-scale culture of mammalian cells. Specific duties will include supervising a group of cell biologists as they collaborate with scientists throughout the anti-infective, cardiovascular, immunoscience, and neuroscience fields.

We require a PhD or equivalent in the life sciences—cell biology preferred—and 3-5+ years of relevant postdoctoral experience. Knowledge of molecular biology would be a plus. Reply to Job# CB.

MOLECULAR BIOLOGIST

Responsibilities include assisting in the cloning and expression of recombinant proteins. Candidates need a BS/MS in molecular biology, genetics, or other biological science, and 2-4+ years experience using standard molecular biology techniques. Experience with tissue culture methodologies and gene cloning and expression is strongly desired. Reply to Job# MB.

PHARMACOLOGISTS/ MOLECULAR - CELL BIOLOGISTS Neuroscience Research

As part of its on going commitment to the discovery of new drugs for central nervous system disorders, the Neuroscience Research Division at Abbott has three openings at the Ph.D. level in the areas of neurodegeneration and ischemia. You will be part of a focused multidisciplinary drug discovery team, and will contribute to the delineation of project goals and their implementation.

A minimum requirement of 2 years postdoctoral experience in neuroscience or related disciplines is essential. Both the ability to work independently as demonstrated by a proven record of publications and the willingness to work within a collaborative, team-oriented environment would be beneficial.

For the **ischemia position**, the individual will be responsible for the development and implementation of *in vivo* cerebral ischemia models and should have practical experience in this area. Knowledge of the molecular mechanisms of stroke related cell death would be advantageous. Reply to Job# JK.

For the **neurodegeneration positions**, research experience and interest in the area of Alzheimer's disease and/or neuroimmunology at the molecular level would be a distinct advantage. Reply to Job# CML.

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban setting, approximately 30 miles north of Chicago. For confidential consideration, please forward a resume (indicating appropriate Job#) and salary history to: **Patricia Handy, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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POSTDOCTORAL OPPORTUNITIES

Anti-Infectives and Cardiovascular Pharmacology

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has postdoctoral openings available in its Anti-Infectives and Cardiovascular Pharmacology Departments.

Anti-Infectives

The successful candidate will explore the transcriptional regulation mechanisms of viral and mammalian transcriptional factors, establish yeast based screens for different transcriptional factors and be familiar with aspects of virology.

Qualified candidates will have a Ph.D. in Molecular Biology, Virology or related field, knowledge of transcriptional regulation mechanisms, and willingness to work with human pathogenic viruses. The scientist will collaborate with members of other departments on feasibility studies and transfer of technology. Ability to present scientific data and a proven record of publication is desirable. #L0126.

Cardiovascular Pharmacology

The successful candidate will work with a team of scientists who are using histochemical and molecular biology techniques to explore mechanisms of disease processes and assess the effectiveness of new drug therapy. The scientist will perform mRNA analysis by northern blot and PCR and *in situ* hybridization of RNA/DNA of peptide mediators in tissues of normal and disease states, as well as utilize immunocytochemical techniques to identify peptides in tissues of normal and disease states.

Qualified candidates will have a Ph.D. in Biochemistry/Molecular Biology or related fields, experience in RNA/DNA isolation and hybridization techniques and knowledge in the use of computer applications. Basic knowledge in immunocytochemistry or related histological disciplines and a biochemical background is desired. Ability to present data in internal and external scientific meetings and a proven record of publication is required. #L0127.

Our state-of-the-art research facility is located in suburban Philadelphia near Valley Forge, PA. We offer a competitive compensation/benefits package, as well as a stimulating work environment in which to grow and excel. For confidential consideration, please send your resume, indicating job number to: Marilyn Leggieri, Associate Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

POST-DOCTORAL SCIENTISTS

Adhesion Biology

The Upjohn Company, a recognized leader in pharmaceutical research and development, currently has several excellent opportunities for Post-doctoral Scientists in our Adhesion Biology group under the direction of Donald C. Anderson, M.D.

Successful candidates would join a multi-disciplinary group developing therapeutics based upon an understanding of the role of cell adhesion molecules in inflammation.

Research activities include the definition of adhesion molecule structure at the three dimensional level, mechanistic studies of adhesion molecule function and investigation of the regulation of adhesion molecule expression in models of inflammation.

A Ph.D. in biochemistry, molecular biology or related discipline is required.

Appointments are for one year, renewable for a second year. The Upjohn Post-doctoral Program is designed to provide a top-quality research experience and the opportunity to publish scientific results with an excellent salary and benefits package offered. Upjohn Laboratories offers a stimulating, multi-disciplinary research environment at our modern facilities located in Kalamazoo, a southwestern Michigan community located midway between Detroit and Chicago. For confidential consideration, please submit your curriculum vitae to:

Donald C. Anderson, M.D., The Upjohn Company, Unit 5045-298-180, 7000 Portage Road, Kalamazoo, MI 49001. Please refer to specialty code #115 in your cover letter. An Equal Opportunity Employer M/F.

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IMMUNOLOGIST

Sandoz Pharmaceuticals Corporation is responsible for products that improve the quality of life. Our developments are the result of research conducted by professionals who specialize in many different fields. We currently have an opening for an Immunologist.

The selected individual will study new molecular and cellular targets in the field of immunology/inflammation as well as developing methods/assays and producing compounds.

To qualify, you must possess a BS/MS degree or equivalent in biology or a related discipline, with 2-3 years of relevant experience in tissue culture; cellular immunology, immuno-assays; immunochemistry and biochemistry. Flow cytometry experience is desirable.

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey. For prompt, confidential consideration, please respond to position #2023DC by forwarding your resume and salary requirements, in confidence, to:

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Staffing Department
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East Hanover, NJ 07936

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POSITIONS OPEN

CARDIOVASCULAR BIOLOGY LABORATORY

POSTDOCTORAL FELLOWSHIP to study the molecular biology of vascular smooth muscle proliferation. Candidates should have an M.D. or Ph.D. in the biological sciences with a strong background in molecular biology. Send curriculum vitae, list of publications, and the names of three references (with telephone numbers) to: **Caesario F. Bianchi, M.D., Ph.D.**, Division of Biological Sciences, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115. Telephone: 617-432-4995; FAX: 617-432-4098.

TWO POSTDOCTORAL FELLOWSHIPS.

Available for candidates with cellular experience and molecular skills such as subtraction library, conventional cDNA cloning, or cDNA cloning from single cells. Large interactive multidisciplinary cancer center focusing on breast cancer. Areas of study include mechanism of resistance to antiestrogen and study of a new growth factor in breast cancer. Reply to: **Robert B. Dickson, Ph.D.** or **Soonmyoung Paik, M.D.**, Lombardi Cancer Research Center, Georgetown University, 3800 Reservoir Road, NW, Washington, DC 20007.

POSTDOCTORAL FELLOWSHIPS IN HEPATOLOGY RESEARCH

NIH training grant-funded positions are available for a minimum of 2 years in an established interdisciplinary program in basic investigative hepatology. Interested individuals must have an M.D. and/or Ph.D. and a strong interest in developing an academic career in basic liver cell and molecular biology and/or pathophysiology. Send curriculum vitae and names of three references to: **Dr. Allan W. Wolkoff, Liver Research Center, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE.

Immediate opening for postdoctoral position in laboratory focused on second messenger signaling of stretch-stimulated hormone secretion and stretch-stimulated gene expression. Send curriculum vitae and the name and telephone number of three references to: **Dr. Rick Schiebinger, Wayne State University, UHC-4H, 4201 Saint Antoine, Detroit, MI 48201.** Wayne State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCHER. Industrially supported position available immediately to study the genetics and physiology of biodegradable plastic (poly- β -hydroxybutyrate) synthesis in *E. coli*. Applicant must be well versed in modern recombinant DNA techniques. Salary will be approximately \$26,000. For our recent work see 24 April issue of *Science* and April issue of *App. Env. Microbiol.* Curriculum vitae and names of three references should be sent to: **Dr. Douglas Dennis, Department of Biology, James Madison University, Harrisonburg, VA 22807.**

POSTGRADUATE RESEARCH POSITION at EPA's Risk Reduction Engineering Laboratory in Cincinnati, Ohio. Position involves research to develop analytical methods for determination of a wide variety of organic constituents in soil matrices. B.S. or M.S. in chemistry within last 3 years preferred. For information: Postgraduate Research Programs Risk Reduction Engineering Laboratory, Science Engineering Division, ORAU, P.O. Box 117, Oak Ridge, TN 37831-0117, telephone: 615-576-3456.

RESEARCH FELLOW/ASSOCIATE

An immediate opening for a Research Fellow/Associate in morphologic research to join an active team in the field of cardiovascular research. Experience in electron microscopy and immunocytochemistry required. Good publication and grant record preferred. Excellent benefits. Please send resume to: **Lynn B. McGrath, M.D., Director, Deborah Research Institute, Trenton Road, Brown Mills, NJ 08015-1799.** Equal Opportunity Employer M/F.

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POSITIONS OPEN

POSTDOCTORAL POSITION IN LASER OPTICS/PHYSICS. The Department of Oral Sciences, Eastman Dental Center, Rochester, New York, seeks applicants for a **POSTDOCTORAL RESEARCH** position, beginning as soon as possible, and funded by an NIH grant for 3 years. A Ph.D. in physics or optics is required, with training in lasers. A working knowledge of CO₂ lasers is an advantage. Research in laser interactions with dental hard tissues has been ongoing for 8 years in conjunction with the nearby University of Rochester Laboratory for Laser Energetics. The position will require work at both facilities on fundamental aspects of laser/mineral interactions, in a multidisciplinary medical, dental and basic research community. Submit curriculum vitae, reprints, and names of references to: **Dr. J. D. B. Featherstone, Chairman, Department of Oral Sciences, Eastman Dental Center, Rochester, NY 14620.** An Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW. To study: (1) Molecular biological/biochemical questions in the eye as it is affected by aging, nutrition, protease, and/or antioxidant function. (2) Mechanisms of life extension via dietary caloric restriction. List of projects available. *Must be eligible to work in the United States.* Send résumé 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 ASSOCIATE DUKE UNIVERSITY MEDICAL CENTER

Position available for new or recent Ph.D. with molecular biology or protein purification experience to work in laboratory investigating the biochemical and genetic basis of blood group antigen expression by cell surface proteins. Current laboratory projects include protein isolation, epitope mapping, cloning of cDNA, gene structure, and expression of proteins via transfection in mammalian cells. Position may be assumed on or after 1 July 1992, and will be for a minimum of 1 year. Send curriculum vitae, with names of three references and statement of interests, to: **Marilyn Telen, M.D., Box 3387, Duke University Medical Center, Durham, NC 27710.** FAX: 919-681-5864. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE PLANT PHYSIOLOGICAL ECOLOGY. Desert Research Institute (DRI), Reno, Nevada. Work in modeling whole-tree (TREGRO) and forest-stand (ZELIG) responses to environmental stress. Research background in tree physiology and ecology essential with interest in computers and modeling. Requires model parameterization for multiple tree species in North America, stimulation of forest tree growth under scenarios of pollution-climate interactions and publication of significant findings. Incumbent will work with team of scientists at DRI and two other institutions. Position available August 1992. Salary depends on experience. Address inquiries to: **Dr. George Taylor, Biological Sciences Center, Desert Research Institute, P.O. Box 60220, Reno, NV 89509; telephone: 702-673-7337.** Send curriculum vitae and names and addresses of three references to: **Recruitment Office, Desert Research Institute, University & Community College System of Nevada, P.O. Box 19040, Las Vegas, NV 89132-0040.** Closes 15 June 1992. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

The Minority Center for Toxicological Research is accepting applications for a position of postdoctoral research associate.

Qualifications: Ph.D. in toxicology, biochemical pharmacology, or comparable field with training experience in neurobehavioral toxicology/pharmacology. The project is designed to investigate the role of central dopaminergic receptors in neurobehavioral toxicity of Pb. Salary: \$30,000 per year. (Availability contingent upon funding of a grant.)

Send detailed résumé with letter of interest to:

Dr. Arun L. Jadhav
Assistant Dean for Research & Graduate Education
College of Pharmacy & Health Sciences
Texas Southern University
3100 Cleburne Street
Houston, TX 77004
Telephone: 713-527-7557

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Atmospheric Scientist

You will be part of a team in climate modeling research for model development and numerical simulations in the areas of global or mesoscale modeling. Current research areas include cloud parameterizations for general circulation models (GCMs), GCM-mesoscale interface for regional climate simulations, GCM development on massively parallel computers, global greenhouse trace gas modeling and ocean-atmosphere coupling. You will also participate in projects with other agencies, laboratories and universities, and will participate in competing for funding from DOE and other agencies.

The Laboratory provides one of the most advanced computing facilities in the world, including Cray supercomputers and modern workstations. Computers with massively parallel architecture, such as CM-2, are also available for atmospheric research. Other facilities or institutes within the Laboratory such as Advanced Computing Laboratory (ACL), Institute of Geophysics and Planetary Physics (IGPP), and Center for Nonlinear Studies (CNLS) also sponsor research in climate modeling. Under the auspices of the University of California Institutional Collaborative Research (UC INCOR) Program, ample opportunities are available for developing joint projects between Los Alamos National Laboratory and University of California campuses.

To qualify, you must have documented background in either meso- or global-scale modeling for atmospheric/oceanic research directly related to global climate change as well as demonstrated experience in model development/numerical simulations. Relevant postdoctoral experience is desired. Excellent oral/written communication skills and the ability to work as a team member are desired. This position requires a Ph.D. in Atmospheric Sciences or related field or the equivalent combination of education and experience.

To formally apply for this position, interested candidates should forward a resume to **Cathy Majerus (MS P280), Personnel Services Division 20195-Y, Los Alamos National Laboratory, Los Alamos, NM 87545.** Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy "Q" Security Clearance, which normally requires U.S. citizenship.

Los Alamos

NATIONAL LABORATORY

Applied Biosystems, a leading supplier of systems and tools for biotechnology research, is currently expanding the Diagnostics R&D group based in the **San Francisco Bay Area**. As part of our commitment to the future, we have openings for individuals who wish to participate in bringing tomorrow's technology into the clinical arena. We are seeking talented professionals to be part of a multi-disciplinary team working to create a line of DNA diagnostic products.

Research Scientists in DNA Diagnostics

Research Chemist You will conduct research on developing syntheses of novel oligonucleotides and studying their biophysical interactions with target DNA. The position requires a PhD in Chemistry plus at least 2 years R&D experience in synthetic organic chemistry. Strong analytical skills as well as experience in the biophysical characterization of oligonucleotides is highly desirable. (Ref. #0855)

Molecular Biologist/DNA Biochemist You will help develop proprietary oligonucleotide ligation technology into clinical diagnostic assays. Calls for Life Sciences PhD, plus at least 4 years working with nucleic acid hybridization, amplification and detection. Molecular genetics, cell culture, microbiology, or diagnostics assay development experience strongly preferred. (Ref. #0493)

We offer a competitive salary and generous benefits package. Please send your resume, indicating Reference Code, to: Applied Biosystems, Inc., Human Resources, 850 Lincoln Centre Drive, Foster City, CA 94404. We are an equal opportunity employer.



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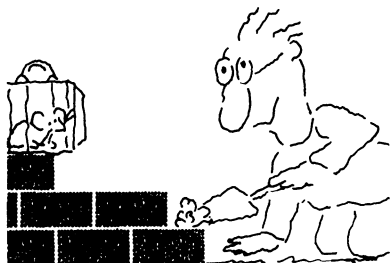
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A Seattle-based pharmaceutical research and development company working in the area of peptidomimetics and drug design offers a stimulating environment incorporating a multi-disciplinary approach to the following individuals:

Sr. NMR Spectroscopist: PhD, NMR Spectroscopist with expertise in the area of multi-dimensional NMR spectroscopy is needed to investigate the structural features of protein-ligand interactions. The successful candidate must be knowledgeable in structural methods. Experience in biochemistry and/or molecular modeling a plus. Our NMR laboratory is equipped with a 500MHz NMR and work stations.

Sr. Analytical Chemist: PhD with strong background in HPLC techniques and, preferably, one or two years of postdoctoral or industrial experience. The successful candidate will perform and supervise HPLC activities and should be capable of working independently to develop and validate analytical methodology for new pharmaceutical agents. This candidate will work closely with and provide analytical support to research chemists and will evaluate purity of new agents.

Sr. Pharmacologist: PhD pharmacologist with minimum of 2 years of postdoctoral experience, preferably in the area of immunopharmacology. Ability to set up and organize research, including troubleshooting equipment, resolving experimental design problems and supervising one or two research assistants required. Working knowledge of routine *in vitro* and *in vivo* experiments and analytical expertise is essential.

Research Chemist: Synthetic Organic Chemist to provide routine and specialized peptide synthesis and technical support. Qualified applicants will have a BS or MS in organic chemistry, 2+ years relevant experience and familiarity with synthesis, purification, and characterization of synthetic intermediates and peptides. Experience in automated solid phase peptide synthesis and HPLC purification techniques is highly desirable.

These excellent opportunities offer excellent salary and benefits. Interested and qualified individuals should send resume, including salary history and requirements, **specifying position desired, to: Box 0514SC, c/o Suite 501, 1500 Broadway, New York, NY 10036.** Equal opportunity employer m/f/h/v

RESEARCH SCIENTISTS

GILEAD SCIENCES, an innovative and rapidly growing biotechnology company, is a leader in the development of a broad new class of nucleotide-based pharmaceuticals for the treatment of viral and cardiovascular diseases and cancer. We offer a vigorous research environment for exceptional individuals committed to the development of significant new human therapeutics.

The following opportunities for research scientists are available:

MEDICINAL CHEMIST Ph.D. in organic or medicinal chemistry with 2+ years postdoctoral training and up to 5 years relevant experience and demonstrated ability in the design, synthesis, and improvement of novel biologically-active agents. Successful candidates will join a multidisciplinary team of scientists pursuing the development of anticancer and antiviral therapeutic agents.

MOLECULAR BIOLOGISTS Ph.D. with at least 2+ years postdoctoral training and a strong background in either nucleic acid or protein biochemistry.

BIOCHEMIST/ENZYMOLOGIST Ph.D. and at least 2+ years postdoctoral experience in nucleic acid biochemistry (e.g. polymerases, endonucleases, transcription factors). This position will require close interaction with our chemistry division in the design and testing of potential therapeutic agents.

We are located in the San Francisco Bay Area and offer a stimulating scientific environment with excellent salary, benefits, and stock options. Please send CV and reference this ad and position to: **Human Resources Administrator, Gilead Sciences, Inc., 346 Lakeside Drive, Foster City, CA 94404.**

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Amersham Corporation is a leading supplier, distributor and manufacturer of advanced scientific products with global impact. We now seek individuals to play key roles in bringing exciting new high-technology products to market.

Research Scientists M.S. and Ph.D.

Perform laboratory work for molecular biology product development projects, and new product concept testing projects. Will also prepare technical drafts, as well as journal articles and posters resulting from work performed in development. Positions also coordinate activities with customers, sales, product managers, development staff and manufacturing. Candidates for some positions will need a Ph.D. in a life science or organic chemistry, 2 years postdoctoral experience, 2 years experience in product development, and expertise in nucleotide chemistry desired. Additional candidates will need a master's degree in a life science or organic chemistry and 4 years experience in molecular biology research. Two years experience in product development and expertise in nucleotide chemistry highly desirable.

R&D Technician

Perform laboratory work in molecular biology R&D, manage day-to-day lab operations and ensure a safe, clean work environment/lab. A BS in a life science along with 2 years experience in molecular biology research (4 years preferred) are required. Two years experience in product development is helpful.

Laboratory Application Technician

Provide lab support including assisting in training the field sales and in-house life science staff in molecular biology and techniques; providing strategic input to the applications lab manager and product managers, and acting as a liaison with sales, regional and product managers, development groups, and with our life science customers. Candidates should have a BS in a life science and 3 years experience in a life science setting with an emphasis on molecular biology, protein studies, and/or cellular interactions. Publication experience and knowledge of life science customer base are desired.

Technical Associate

Responsible for all technical inquiries and complaints generated by customers, and for maintaining and expanding customer knowledge base for existing and new products (mainly in areas of molecular biology). Requirements include a master's degree in biology, molecular biology, chemistry, biochemistry, microbiology or similar science; 1 year technical laboratory experience in molecular biology; and previous experience in a direct customer-interactive position. Previous technical services experience preferred.

Amersham offers a growth oriented professional environment and an attractive compensation package that includes 401(k) and tuition reimbursement. Send resume, indicating which position you are interested in, to: **Human Resources, Amersham Corporation, 2636 S. Clearbrook Dr., Arlington Heights, IL 60005.** An Equal Opportunity Employer.

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National Institutes of Health

Bethesda, Maryland

ASSOCIATE DIRECTOR FOR RESEARCH SERVICES

The National Institutes of Health (NIH), the world's largest biomedical research facility is seeking an Associate Director for Research Services. The Associate Director advises NIH senior staff on resource and support services in support of the NIH biomedical research mission. NIH employs over 16,000 individuals and has a budget in excess of \$9 billion. The position oversees a 306 acre campus in Bethesda, Maryland, with approximately 60 buildings and facilities, off-campus facilities in Maryland, North Carolina and Montana, an operating budget of \$219 million, a building and facilities budget of \$100 million, and employs over 1,200 individuals in a variety of professional, technical and trades occupations. The position directs a complex program including: Engineering Services, Safety, Space and Facility Management, Support Services, and Security Operations.

REQUIREMENTS: The position requires an individual with strong leadership and managerial abilities. Experience in resource and support services for a large complex organization is preferred.

SALARY: This position is in the Federal Government Senior Executive Service (SES), ES-1 to ES-6. Current salary ranges from \$90,000 to \$112,100 with possible relocation or retention bonuses available upon individual approval.

Send a completed "Application for Federal Employment" (SF-171) to:

**Director,
Division of Personnel
Management, NIH, 9000
Rockville Pike, Bldg. 1,
Room B1-60, Bethesda,
MD 20892.**



For more information, call 301-402-1286.

All Applications must be received no later than **June 5, 1992.**

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POSITIONS OPEN

RESEARCH ASSOCIATE/POSTDOCTORAL POSITIONS in neuroscience are available to study the electrophysiology and/or the molecular biology of voltage- and ligand-gated ion channels. Studies will involve electrophysiologic analysis using patch clamp techniques and the molecular characterization of ion channels in relation to aging and age-related neurologic disorders. Candidates should have a Ph.D. and experience in fields related to the area of study. Salary range: \$25,000 to \$30,000 per year depending on experience. Send curriculum vitae and names of three references to: **Dr. Philip W. Landfield, Department of Pharmacology, University of Kentucky, College of Medicine, 800 Rose Street, Lexington, KY 40536. Telephone: 606-233-6209; FAX: 606-258-1981. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL RESEARCH BIOENGINEER. Conduct research on brain potentials in humans evoked by auditory stimuli. To determine the effects of skull conductivity and shape upon solutions to the inverse problem; unfold overlapped waveforms from high stimulus repetition rates. Working knowledge of electrical impedance tomography and computer programming, and theoretical knowledge of computer finite and boundary element methods are required. Minimum: Ph.D. in bioengineering or related field. Salary: \$41,400 per year. Job site and interview: Mill Valley, California. Send résumé with ad to: **Job #NOF567, P.O. Box 9560, Sacramento, CA 95823-0650** no later than 30 May 1992.

RESEARCH ASSOCIATE position available in the Department of Pediatrics at the University of Oklahoma Health Sciences Center to facilitate molecular biology research in childhood diseases. Responsibilities include serving as a resource person for molecular biological techniques, collaborating with pediatric investigators, and supervising technical personnel. Nontenure-track faculty position. Ph.D. with postdoctoral research experience in molecular biology required. Curriculum vitae and references to: **Dr. Marilyn Steele, Children's Hospital of Oklahoma, P.O. Box 26307, Oklahoma City, OK 73126.**

ASSISTANT IN PHYSIOLOGY

The position involves studies on angiotensin II receptor gene expression and hypertension. An M.D./Ph.D. or equivalent degree with 1-year postdoctoral training in angiotensin receptor research is required. Must be skillful in PCR, recombinant DNA, DNA sequencing technology. Recruiting deadline date 29 May 1992. Minimum salary \$20,000 per year, plus fringe benefits and health insurance. Send curriculum vitae and three letters of reference to: **Dr. M. K. Raizada, Department of Physiology, College of Medicine, University of Florida, Box 100274, Gainesville, FL 32610-0274. Equal Employment Opportunity/Affirmative Action Employer.**

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Organizing large team of scientists including fields of: bioengineering, genetics, immunology, endocrinology and hormone research, gerontology, biochemistry, nutrition, geriatrics, toxicology and oncology for R&D related to the aging process. Seeking full-time scientists and part-time consultants to fill all positions from president to lab assistants. Excellent remuneration and equity participation offered. Send résumé to: **Box 17, SCIENCE, Suite 814, 1333 H Street, NW, Washington, DC 20005.**

Argonne National Laboratory has an opening for an **ECOTOXICOLOGIST** to participate in a multidisciplinary team conducting environmental assessments and research on ecological risk. Considerable knowledge of contaminant fate, effect, and risk is required along with an ability to plan and execute field studies and model uptake and transfer of contaminants in ecosystems. A Ph.D. in ecology or a related field is required. Applicants should submit their curriculum vitae, the names and addresses of three references, and a statement of research interests by 15 June 1992 to: **Susan M. Walker, Box EID-94153-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Argonne is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ENVIRONMENTAL PROFESSIONALS sought with experience in terrestrial or wetland biological sciences; aquatic ecology; environmental toxicology; bio-statistics; ecological risk assessments or geographic information systems (GIS). Successful candidates should have good written and oral communication skills and a desire to interact with clients and regulatory agencies. Ph.D. or M.S. preferred, quantitative and computer skills desired. Ability to work in a multidisciplinary team environment a must. Send résumé and salary history to: **Manager of Human Resources, Breedlove, Dennis & Associates, Inc., P.O. Box 720037, Orlando, FL 32872-0037. An Equal Opportunity Employer.**

DEFENSE NUCLEAR AGENCY ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE BETHESDA, MARYLAND

The Radiation Biophysics Department is seeking an experienced **CELLULAR RADIOBIOLOGIST** to serve as the Chief, Biophysics Division. The selectee will lead a team of military and civilian scientists, and assume overall responsibility for formulating and conducting a broad-based program of original research concerned with the physical and biological basis for cellular changes induced by ionizing radiation. The successful candidate must have mastery of a broad range of knowledge associated with the conduct of scientific research in cellular radiobiology, biophysics and radiation science. This is a career senior-level position in the Federal Civil Service, Grade GS-15, salary range \$64,233 to \$83,502 per annum, with full federal employee benefits available. U.S. citizenship required. Call: **Personnel Office, 301-295-1426**, to request application package for Announcement number **AFRR1-010/92**. Application materials must be received no later than 29 May 1992. *The Defense Nuclear Agency is an Equal Opportunity Employer.*

FUNGAL GENETICIST

Monterey Mushrooms Inc., a world leader in mushroom production and technology, located on California's Monterey Bay, is seeking a fungal geneticist to join our strain improvement program. The successful candidate will have a Ph.D. or an M.S. with significant experience, and will participate in the development of new cultivars of the button mushroom, *Agaricus bisporus*. Applicants must have a demonstrated knowledge of molecular markers, their use in strain fingerprinting and linkage analysis, as well as an understanding of fungal physiology and metabolism.

Please send curriculum vitae, with a summary of research interests and three references to: **Human Resources, Monterey Mushrooms Inc., P.O. Box 189, Watsonville, CA 95077. Equal Opportunity Employer.**

THE SELECTIDE CORPORATION

We have immediate opportunities for **RESEARCH SCIENTIST** and **RESEARCH ASSISTANT ASSOCIATE** in the newly formed Department of Biochemistry.

The **SCIENTIST** will play a major role in drug discovery using novel technology for discovery of peptides of pharmaceutical interest (Lam et al., *Nature*, 7 November 1991) with focus on enzyme/protein targets involved in blood coagulation, immune diseases and cell growth regulation. Selectide has close ties with the University of Arizona (UA) with opportunity for ongoing collaborations with participating UA investigators. Applicants will be of particular interest who have a Ph.D. degree in biochemistry or molecular biology and completed 3 years of postdoctoral fellowship. Understanding of peptide-peptidomimetic chemistry, structure-function relationships and previous experience in enzymology is a prerequisite.

RESEARCH ASSOCIATE should have a B.S. or M.S. degree in biochemistry or molecular biology and should be familiar with novel and traditional techniques of protein chemistry and enzyme-inhibitor characterization.

Each applicant should submit a cover letter including the names of two professional references and a copy of his/her curriculum vitae and biosketch by 15 June 1992 to:

**Peter Strop, Ph.D.
Director, Department of Biochemistry
The Selectide Corporation
10900 North Stallard Place, Suite 122
Tucson, AZ 85737
FAX: 602-575-8283**

**Department of Energy
Office of Energy Research
Special Research Grant Program Notice 92-16: Health Effects Research**

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy, hereby announces its interest in receiving applications for Special Research Grants in support of the Health Effects Research Program. The primary objective of this Program is to develop the information base necessary to identify, understand, anticipate, and mitigate the health consequences of exposure to energy-related agents (e.g., radiation or chemical). The Program examines radiological and chemical effects at all levels of biology including molecular, cellular, tissue/organ, and whole animals; and it uses these findings to develop a mechanistic understanding of effects and to provide the information necessary for predicting risk from exposure. The biological resources and the new technologies that are being developed in the Human Genome Program are revolutionizing the ability to detect and quantify genetic damage leading to mutations, tumors, and other health endpoints. The DOE is seeking applications that exploit these technological advances and that provide new information that can be used to gain a better understanding of impacts on humans who are exposed to low-dose radiation and/or toxic chemicals. While the research covered by this Program is broad in scope, the current solicitation is seeking preapplications primarily in the following three areas: (1) DNA repair; (2) cellular and molecular mechanisms of carcinogenesis (especially those using human cell systems); and (3) low dose radiation studies, $<10\text{cGy}$, that will improve our understanding of the dose effect relationships at low doses.

Before preparing a formal application, potential applications are encouraged to first submit a brief preapplication in accordance with 10 CFR 600.10(d) (2) which consists of two to three pages of narrative describing the research project objectives and method of accomplishment. These will be reviewed relative to the scope and the research needs of the Health Effects Research Program. Preapplications referencing Program Notice 92-16 should be received by June 15, 1992, and sent to the following address: Dr. Marvin E. Frazier, Office of Health and Environmental Research, ER-72 (GTN), Washington, D.C. 20585, (301) 903-5364, FAX (301) 903-7363. Telephone and telefax numbers are required to be part of a preapplication. A response to the preapplications discussing the potential programmatic relevance of a formal application will be returned.

DATES: Formal applications submitted in response to this Notice must be received by 4:30 p.m., E.D.T., August 21, 1992, to be accepted for merit review in October 1992 and to permit timely consideration for award in Fiscal Year 1993.

ADDRESSES: Formal applications referencing Program Notice 92-16 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64, Mail Stop G-236, Washington, D.C. 20585, ATTN: Program Notice 92-16. The following address must be used when submitting applications by U.S. Postal Service Express, any commercial mail delivery service or when hand carried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874

FOR FURTHER INFORMATION CONTACT: Dr. Marvin E. Frazier, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, D.C. 20585, (301) 903-5364.

SUPPLEMENTARY INFORMATION: Through this solicitation, DOE plans to support new research in specific areas of interest that include: DNA repair, molecular mechanisms of carcinogenesis, and mechanistic studies that examine the dose response relationship at low doses ($<10\text{cGy}$).

With this notice DOE is soliciting grant applications to map, close, and investigate the biochemistry of human DNA repair genes. Research is needed that will examine the interactions between DNA repair proteins, DNA, and other macromolecules in order to better define the processes responsible for the repair or fixation of DNA damage. Better methods are also solicited for identifying and characterizing new and modified gene products that are produced in response to damage by physical and/or chemical agents. The DOE is also interested in the use of transgenic cell lines and transgenic animals, in which repair-related genes have been mutagenized or "knocked out," to measure their influence on normal processes of growth and differentiation, genomic instability, gene expression, and DNA repair. The DOE is soliciting research to improve assays for detecting, in humans, mutated DNA repair genes (both homozygous and heterozygous) that may alter susceptibility to DNA damaging agents.

The DOE is requesting research that elucidates the molecular and cellular events underlying spontaneous and induced genetic and epigenetic events that lead to cancer, heritable mutations, and/or congenital malformations. Priority will be given to the use of human cell systems, e.g., stem cells and/or cells from transgenic animals, for examining the effects of dose, dose rate and linear energy transfer (LET) on viability, mutation induction, chromosomal damage, DNA repair, cell transformation, and progression to malignancy.

The most frequent radiation exposures for most people are low-dose, low-dose-rate exposures. The basic hypothesis of risk assessors is that the frequency of low level radiation effects increases as a linear, non-threshold function with dose. The DOE is soliciting research that will test this hypothesis at levels of $<10\text{cGy}$. These studies can include examination of how the cellular and molecular processes that lead to cancer are influenced by dose, dose rate, or LET. The DOE is also interested in effects of radiation or chemicals on the genetic stability of exposed cells. Recent data suggests that clonal progeny or irradiated cells exhibit a persistently elevated frequency of spontaneous mutations and nonclonal chromosomal aberrations for many populations post-irradiation. It is important to understand the mechanisms of these effects, their role in carcinogenesis, and the exposures necessary to trigger the response.

It is anticipated that approximately \$2 million will be available for grant awards during FY 1993, contingent upon availability of appropriated funds. Multiple year funding of grant awards is expected, and is also contingent upon availability of funds. Previous awards have ranged from \$90 thousand per year up to \$400 thousand per year (total costs) with terms from 1 to 3 years. Most awards are in the \$150 thousand to \$300 thousand per year (total costs) range for 3 years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the ER Application and Guide for the Special Research Grants Program and 10 CFR Part 601. ER, as part of its grant regulations, requires at 10 CFR 605.11(b) that a grantee funded by ER and performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health "Guidelines for Research Involving Recombinant DNA Molecules" (51 FR 16958, May 7, 1986), or such later revision of those guidelines as may be published in the Federal Register. The application kit and guide is available from the U.S. Department of Energy, Acquisition and Assistance Management Division, Office of Energy Research, ER-64, Washington, D.C. 20585. Telephone requests may be made by calling (301) 903-5468 or FTS 233-5468. Instructions for preparation of an application are included in the application kit. The Catalog of Federal Domestic Assistance Number for this program is 81.049.

POSITIONS OPEN

FLOW CYTOMETRY

Position available to manage, operate and develop the Flow Cytometric facility at Fred Hutchinson Cancer Research Center. Several years of research experience using flow cytometry, a working knowledge of a broad range of flow cytometric methodologies and computer data analysis techniques; extensive experience using instrumentation including optics, lasers, computers; and knowledge of the principles of instrument operation and experience in instrument problem solving required. Excellent communication, teaching, leadership and managerial skills are necessary. Excellent benefits package and a smoke-free environment. FAX résumé to: 206-667-4051, or send résumé to:

Fred Hutchinson Cancer Research Center
Human Resources Office #HN-3187
1124 Columbia Street, MP900
Seattle, WA 98104
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INTESTINAL CELL BIOLOGIST

The Nemours Research Program of the Alfred I. duPont Institute intends to establish a Gastroenterology Research Laboratory and invites applications for the position of Director of Laboratory. We are seeking an individual whose interests lie in some aspect of intestinal cell biology/physiology research, preferably with experience using cultured intestinal cell lines. In this position the appointee will pursue his/her own independent research and also promote collaborative research with existing programs in intestinal cellular energy metabolism, transport, and gastrointestinal motility and inflammation. The Nemours Research Programs currently include a variety of active programs in several areas of cell and developmental biology.

The Alfred I. duPont Institute is a rapidly growing, multidisciplinary children's hospital and the major pediatric teaching affiliate of Jefferson Medical College. Growth of the Gastroenterology Research Program has been occurring in parallel with the development of an academically oriented clinical program in pediatric gastroenterology and nutrition. The Gastroenterology Division will be staffed by three full-time physician investigators, along with research technical support, by July 1992.

Interested parties should mail a letter of interest, curriculum vitae, and salary history (required) to: Alfred I. duPont Institute, Research Department, P.O. Box 269, Wilmington, DE 19899, Attention: Research Administration. Applications will be accepted until the position is filled.

ATTENTION SCIENCE ADVERTISERS \$40 SPECIAL

Place your classified ad in any May-August 1992 issue of SCIENCE and get double exposure. We'll display the same position announcement at the Employment Exchange during the AAAS Pacific Division Meeting or Science Innovation '92 for only \$40 more. That's less than the cost of one additional line.

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The Employment Exchange will take place at the AAAS Pacific Division Meeting, 21-24 June 1992, at the University of California, Santa Barbara campus; followed by Science Innovation '92, 21-24 July 1992, at the Moscone Convention Center in San Francisco, California. Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 8 May 1992 issue of Science, or contact Jacquelyn Roberts at (202) 326-6737, FAX: (202) 842-1065.

POSITIONS OPEN

COMMONWEALTH OF PENNSYLVANIA ENVIRONMENTAL ECONOMIST SALARY RANGE: \$39,511 to \$61,066

The Pennsylvania Department of Environmental Resources has an opening for an economist specializing in either ecological or engineering economics or both. The position will focus on economic aspects of protecting public health and the environment and may, depending on the applicant's qualifications, include natural resource valuation/cost recovery, cost-risk-benefit issues in the choice of remedial alternatives and evaluation of engineering effectiveness, impacts of permitting on high value natural resources, and costs of policy implementation versus health and other costs of not implementing. It will involve development and review activities, expert witnessing and staff training. Strong writing and communication skills and a doctorate in one or more of the above disciplines is required. This position is located in Harrisburg, Pennsylvania. Send résumés with copy of this ad to: The Pennsylvania Department of Environmental Resources, Bureau of Personnel (EE), Room 717, Executive House, P.O. Box 2357, Harrisburg, PA 17120. For further information, call Linda Walde at: 717-783-2021.

The Department is an Equal Employment Opportunity/Affirmative Action Employer.

MOLECULAR CELL BIOLOGIST

Research positions to join a group of investigators exploring hormonal and age-dependent regulation of transcription factors. Ph.D. with experience in gene expression and DNA-protein interactions is required. Stimulating academic environment, generous salary support and excellent living conditions. Send curriculum vitae and names of three referees to: Arun K. Roy, Ph.D., Professor of Cellular & Structural Biology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762. An Affirmative Action/Equal Opportunity Employer.

PHYSIOLOGIST, GS-413-13/14, Cardiac Rhythm Disturbances. Seeking a physiologist with knowledge of cardiac electrophysiology to administer program. Candidates must have a Ph.D., M.D., D.V.M. or equivalent degree and be committed to an administrative, nonlaboratory career. Excellent verbal and written communication skills required. Please submit Application for Federal Employment, SF-171, and curriculum vitae to: National Heart, Lung, and Blood Institute, Attention: Ms. Logan, Personnel Office, Building 31, Room 5A28, 9000 Rockville Pike, Bethesda, MD 20892; telephone: 301-496-6477. Applicants must be a U.S. citizen. National Institutes of Health is an Equal Opportunity Employer.

RESEARCH SCIENTIST (neural computation). Conduct research and analysis in nonlinear science for application in satellite communications, space robotics, signal and image processing. Emphasis in theory of neural networks, neural computation, network dynamics, learning theory and algorithms. Mathematical modeling for design of circuit architectures for fast parallel distributed computers and control systems. Ph.D. in mechanical, electrical or nuclear engineering, plus 1 year of experience in position or 1 year of research in neural network theory and applications. Must be knowledgeable in concepts and developmental aspects of neural network information systems, including Hypercube supercomputers. Salary: \$4790 per month. Forty-hour week. Job site and interview in Pasadena, California. Send this ad and your résumé to: Job #WS 12669, P.O. Box 9560, Sacramento, CA 95823-0560, no later than 30 May 1992.

SCIENTIFIC CONSULTANT, full-time. Consulting firm seeks individual with top writing and speaking skills and advanced scientific degree for high visibility position working with clients in pharmaceutical, biotechnology and investment industries. Knowledge of pharmacology, biochemistry, molecular biology desired; clinical experience helpful. Assignments include investment analysis, strategic planning and drug development projects. Submit curriculum vitae and letter to: Scheer & Company, Inc., 250 West Main Street, Branford, CT 06405.

POSITIONS OPEN

STATISTICAL CONSULTANT. Ph.D. in Statistics and 1 year of experience in the job offered or 1 year of experience in the related occupation of teaching statistics. Working knowledge of statistical software (SAS) and DG MV series computers. Statistical consulting involving on-site analysis and computer applications for scientific, managerial, and operational problems. Use research, analysis and computer software techniques. Perform verification and sensitivity analyses for large computer simulation models. Data analysis and computer modeling in compliance with government agency regulations. Experimental designs for client survey. Forty hour week; Salary: \$31,000 per year. Application by résumé to: Colorado Department of Labor & Employment, 600 Grant Street, Suite 900, Denver, CO 80203. Refer to Order No. CO3773952. No later than 15 June 1992.

ANNOUNCEMENTS

PRE-PROPOSALS—Deadline: 1 August 1992. International Foundation for Ethical Research (IFER) has grants available for research into alternatives to the use of live animals in research, testing, and teaching. Projects must take into account the three R's: Refinement, Reduction, and Replacement plus a fourth R: Responsibility. For information and format write: IFER, 53 West Jackson Boulevard, Chicago, IL 60604, or call: 312-427-6025.

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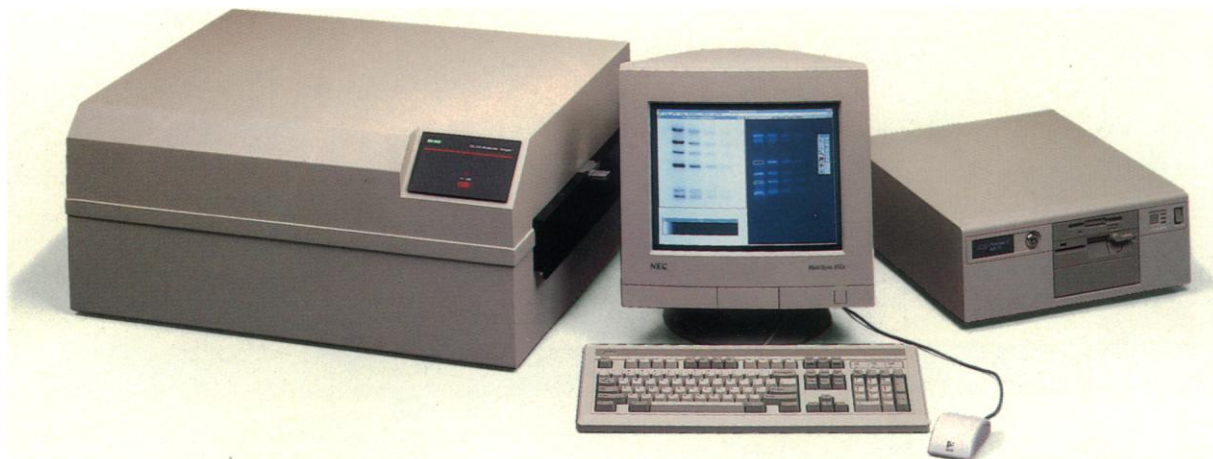
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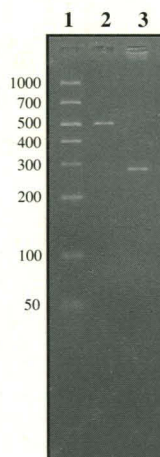
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