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To acknowledge recent outstanding contributions that advance our understanding of issues related to arms control and international security and that have an important scientific or technical dimension. Technology development, scholarly publications, timely analyses, and other professional activities that have advanced our thinking about these issues will be considered. A prize of \$5,000 plus a commemorative medal will be awarded at the 1996 AAAS Annual Meeting. *Deadline for submission of materials is 1 August 1995.*

For more information about the Hilliard Roderick Prize, contact the AAAS Program on Science and International Security at 1333 H Street, NW, Washington, DC 20005; or 202/326-6490; 202/371-0970 (Fax); or PSIS@AAAS.ORG (e-mail).

Announcing A New US Editor!

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Monoclonal Antibodies

The AntiFLAG BioM2 monoclonal antibody (mAb) is a biotinylated version of the Anti-FLAG M2 mAb. It can be detected by streptavidin- or avidin-conjugated enzymes. **Eastman Kodak. Circle 140.**

CD1a mAb performs in fixed, paraffin-embedded tissue sections. In normal cells, it reacts with cortical thymocytes, Langerhans'

cells, and interdigitating reticulum cells. It also reacts with thymomas, Langerhans' histiocytosis cells, some T cell lymphomas, and leukemias. **Immunotech. Circle 141.**

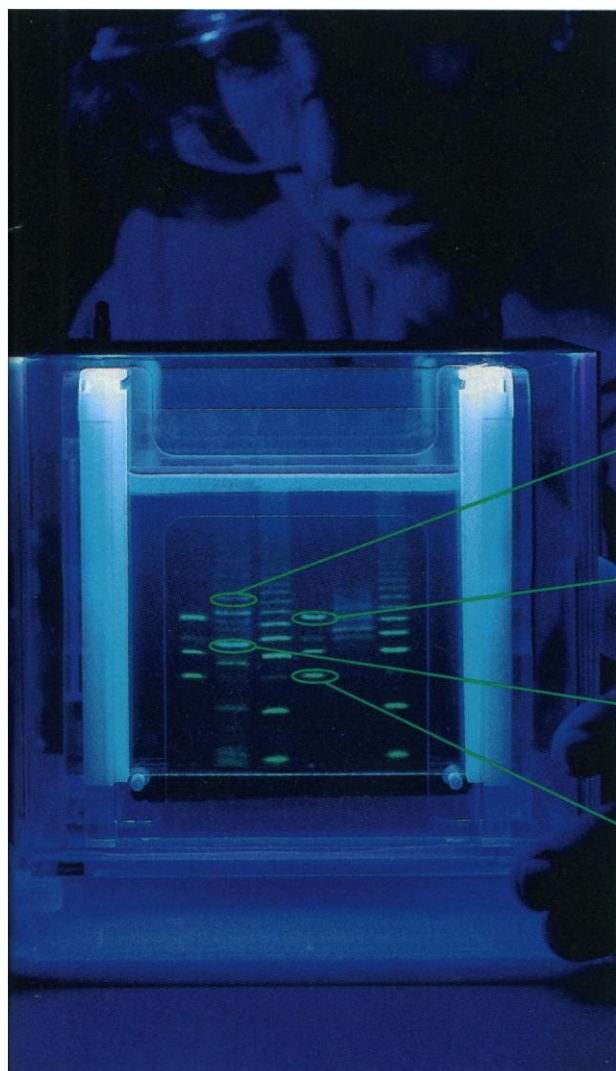
Two new mouse mAbs detect estrogen receptor on cryostat sections and formalin-fixed, paraffin-embedded tissue sections, enabling work to be performed on archive material. **Serotec. Circle 142.**

PCR Detection System

The TaqMan LS-50B PCR Detection System is designed to make polymerase chain reaction (PCR) a routine assay for quantita-

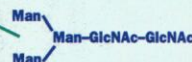
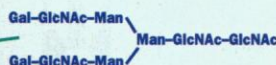
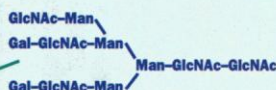


tive sequence detection. Unlike gel-based approaches, the system makes use of a 5' nuclease assay incorporated into the TaqMan



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PCR Reagent Kit. The kit includes PCR primers and a fluorogenic probe that emits fluorescence only if the target sequence is amplified. After the samples and reagents are pipetted into reaction tubes, the tubes are sealed and transferred to the thermal cycler for amplification. A sequence-specific signal is generated in solution during PCR. After PCR, the products are transferred to 96-well plates for detection by a luminescence spectrometer. The simplicity of the process significantly reduces the chance of laboratory contamination by DNA and reduces the quantitative detection of sequences to a fast, reliable format. **Perkin-Elmer. Circle 143.**

Double-Stranded Plasmid DNA

A rapid plasmid preparation kit is designed to purify up to 200 µg of double-stranded plasmid DNA. The Hybaid Recovery Plasmid Midi Prep Kit generates DNA suitable for all uses, including automated fluorescent sequencing and transfection, without the need for hazardous reagents such as phenol and chloroform. Once the culture has been spun down, cells are suspended in 500 µl of water and transferred to the supplied microcentrifuge tube for lysis. DNA extraction from the lysed cells takes place using a silica matrix binding buffer and a spin filter. **Hybaid. Circle 144.**

Fusion Protein Purification Kit

The Fusion Protein Purification Kit allows purification of the fusion protein both from its fusion partner and the cleaving protease. Previous kits produced samples contaminated with either the protease or the fusion partner. Applications for the new kit include the purification of cloned proteins, protein expression studies, protein purification and characterization, sequence analysis of proteins and peptides, and synthesis of peptide hormones. **Boehringer Mannheim. Circle 145.**

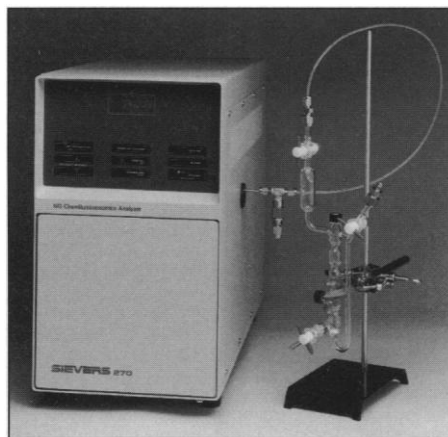
Immune System Response Assay

The FastImmune assay system is for assessing immune function of lymphocyte populations in whole blood. The assay directly assesses individual T-lymphocyte subset responses to a wide variety of physiological and nonphysiological stimuli in under 5 hours. Traditional bulk population assays can take up to 10 days and provide limited information. The system consists of two- and three-

color reagents, isotype and activation controls, and a rapid, no-wash procedure. **Becton Dickinson Immunocytometry Systems. Circle 146.**

Nitric Oxide Analyzer

The 270B Nitric Oxide (NO) Analyzer is based on the chemiluminescent reaction of NO with ozone. The rapid, sensitive method measures trace levels of NO in both liquid



and gas samples. In liquid samples such as tissue perfusates, cell cultures, and plasma, NO, nitrite, and nitrate can be measured through a unique purge system. The 270B can also be used for measuring NO in expired breath because the gas phase response time is 250 ms. The detection limit is 1 pmol for liquids and 5 ppb for gases with a linear response over four orders of magnitude. **Sievers Instruments. Circle 147.**

Literature

Omni International: Homogenizing, Emulsifying, Dispersing, Mixing outlines a complete line of mechanical shear, bench-scale homogenizers, and accessories. **Omni International. Circle 148.**

Mass Standards Handbook is a weighing reference publication that clarifies the application, classification, and physical characteristics of precision weights and mass standards. **Troemner. Circle 149.**

cDNA Synthesis and Cloning is a manual with protocols for every aspect of complementary DNA (cDNA) library construction. It includes an overview, procedures, and troubleshooting guide for RNA isolation, cDNA synthesis, and the cloning of cDNA libraries. **Pharmacia Biotech. Circle 150.**

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

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CONDITIONS: The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

FISHERY SCIENTIST

The Chesapeake Biological Laboratory (CBL) a unit of the University of Maryland System's Center for Environmental and Estuarine Studies (CEES) seeks a fishery scientist for a tenure-track position, preferably at the **ASSISTANT PROFESSOR** level. We seek candidates with postdoctoral experience who are productive researchers and who will be effective teachers and supervisors of graduate students in the University of Maryland-wide graduate program in environmental sciences. Applicants with expertise in the areas of stock assessment and population dynamics, in either finfish or shellfish fisheries, who can undertake research at the interface between fisheries science and management are encouraged to apply. Excellent opportunities exist for interdisciplinary research through collaboration with the fisheries, toxicology, environmental chemistry and ecology groups at CBL, and with ecologists and oceanographers at our sister laboratories of CEES (Horn Point Environmental Laboratory and Appalachian Environmental Laboratory). Application should include personal statement of qualifications and interest, curriculum vitae, and names of at least four references. To ensure full consideration, applications should be received by August 1, 1995. Anticipated appointment is Fall 1995.

Send applications to: **Dr. Edward D. Houde, Chair, Fisheries Search Committee, Chesapeake Biological Laboratory, Center for Environmental and Estuarine Studies, University of Maryland System, P.O. Box 38, Solomons, MD 20688-0038.**

The University of Maryland System is an Equal Opportunity/Affirmative Action Employer. We specifically welcome and encourage applications from women and minority candidates.

STEM CELL SCIENTIST

The Division of Hematology at the University of Washington and the Puget Sound Blood Center (PSBC) are recruiting a M.D. and/or Ph.D. as a regular faculty member at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Closing date for applications is September 1, 1995. The individual is expected to establish an independent research program in stem cell biology at the PSBC. The position also involves teaching and/or clinical consultation. Send curriculum vitae, along with description of research interests, to: **Sherill J. Slichter, M.D., Director of Research, Puget Sound Blood Center, 921 Terry Avenue, Seattle, WA 98104-1256.** *The University of Washington and the Puget Sound Blood Center are Affirmative Action/Equal Opportunity Employers.*

FACULTY POSITION IN TOXICOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Applications are invited for a **TENURE-TRACK** or **TENURED POSITION** in the Department of Community and Environmental Medicine, College of Medicine. Qualifications include: (1) Ph.D. or M.D. degree; (2) a proven record or outstanding promise of research accomplishment and funding; and (3) investigative experience in cell-cell communication and inflammation in toxic mechanisms. Experience in air pollution or inhalation toxicology is required. Participation in The Graduate Program in Environmental Toxicology and in obtaining extramural research support is expected.

Level of appointment and salary will be commensurate with achievement and experience. Curriculum vitae, names and addresses of three to four references, and a summary of research interests should be sent to: **Daniel B. Menzel, Ph.D., Professor and Chair, Department of Community and Environmental Medicine, University of California, Irvine, CA 92717-1825.**

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ASSOCIATE BIOLOGY PROFESSOR AND DEPARTMENT CHAIR Hamline University, St. Paul, MN

Hamline University seeks excellent teacher/scholar for biology **CHAIR**. Responsibilities include coordinating ongoing departmental curricular revision, pursuing interdisciplinary connections on campus, leading efforts to expand the role of sciences in undergraduate general education. Successful candidate will bring curriculum development experience, ability to get funding for undergraduate research program in molecular biology. Substantial institutional support exists for this position. For application instructions, contact: **Associate Dean of the College, Garvin Davenport, gdavenport@piper.hamline.edu.** *Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

POSITIONS OPEN

FACULTY POSITION Experimental Gravitational Physics

The Department of Physics at MIT is seeking candidates for a faculty position in experimental gravitational physics. MIT is collaborating with Cal Tech in developing the Laser Interferometer Gravitational Wave Observatory (LIGO). This will be a national facility dedicated to the detection of gravitational waves from astrophysical sources and will provide unique research opportunities in physics and astrophysics. The successful candidate will engage in undergraduate and graduate education and will establish an independent research program in experimental gravitational physics. He/she may also participate in the development of LIGO. Appointment at the **ASSISTANT PROFESSOR** level or, for an exceptionally qualified candidate, at the senior level will be considered. Given the developing nature of this field, candidates with varied experimental backgrounds will be considered. Applications are requested before October 1, 1995. Applicants should send a curriculum vitae, a brief description of current research, and three letters of recommendation to: **Professor Saul Rappaport, Center for Space Research, Room 37-551, MIT, Cambridge, MA 02139-4307.** *MIT is an Equal Opportunity/Affirmative Action Employer. MIT is a non-smoking environment.*

Applicants are invited for a faculty position at the level of **ASSISTANT PROFESSOR**. Duties include teaching of Gross Anatomy/Histology/Human Anatomy, to veterinary/nursing students. Development of an independent research project is encouraged. A Ph.D. degree is required, but applicants with DVM are preferred. Starting date and salary are negotiable. Send curriculum vitae and two letters of recommendation to: **Dr. A. H. Eljack, School of Veterinary Medicine, Tuskegee University, Tuskegee, AL 36088.**

Columbia University seeks **ASSISTANT** or **ASSOCIATE PROFESSOR** of chemical engineering whose principal research interest is interaction between chemical engineering and biology and medicine. Appropriate doctorate and/or research record required. Tenure-track. Applications will be reviewed as received until successful candidate is identified, but those received after September 15, 1995 may not receive full consideration. Appointment expected in 95-96 academic year. Apply only by mail to: **Prof. E. F. Leonard, Chairman, Search Committee, Columbia University, 500 West 120 Street, New York, NY 10027. Information: 212-854-4448 or leonard@columbia.edu.**

AQUATIC ECOLOGIST Marine Advisory Services Specialist

The Illinois-Indiana Sea Grant Program and Purdue University are seeking an aquatic ecologist (Ph.D. preferred) for an administrative professional position in Biological Sciences at Purdue University Calumet beginning January 1996. Candidates should have background and experience in water quality; experience or training in toxicology or bioremediation is desired.

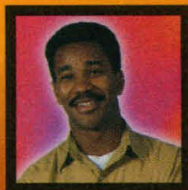
The Marine Advisory Services specialist will devote 70% effort to extension service focusing on water quality and restoration of coastal ecosystems. This encompasses the education, outreach and technology transfer mission of the Program to state agencies, industries, commercial personnel, citizens and communities along southern Lake Michigan. The position interacts with the Purdue Cooperative Extension Service and includes a 30% teaching and research responsibility in the Department of Biological Sciences at Purdue University Calumet.

Purdue University Calumet, a campus of the Purdue system, enrolls over 9,000 students in more than 80 associate, bachelor's and master's degree programs in 16 academic departments. The campus is situated on 180 wooded acres in northwest Indiana, less than one hour by car or train from Chicago. The Department of Biological Sciences offers programs leading to a B.S. degree and an M.S. degree in biology.

Applications should include a curriculum vitae, transcripts, a statement of interest in extension, research and teaching, and three letters of recommendation. Closing date for applications is September 1, 1995, or until a suitable candidate is found. Applications should be addressed to: **Chair, Search Committee, Biological Sciences, Purdue University Calumet, Hammond, IN 46323.**

Purdue University Calumet is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

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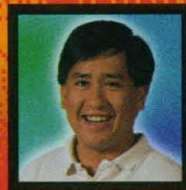
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SOIL MICROBIOLOGY

Florida International University (FIU), the State University of Florida at Miami with an enrollment of 26,000 students, seeks a Soil Microbiologist. This tenure-track position, at the ASSISTANT PROFESSOR level, will have half-time commitments to the Department of Environmental Studies and the Southeast Environmental Research Program (SERP). SERP, a research unit within the university, sponsors multidisciplinary studies in the Everglades, Florida Bay, and the Florida Keys. Applicants must have a Ph.D. and an active Research Program; postdoctoral training is desired. The successful candidate will teach undergraduate and graduate soils and environmental studies courses and pursue externally funded research. To apply, send a curriculum vitae, names of three references, and one-page statements of teaching and research interests to: Dr. Bradley C. Bennett, Soil Microbiology Search Committee Chair, Department of Biological Sciences, Florida International University, Miami, FL 33199. Telephone: 305-348-3586; FAX: 305-348-1986. Applications must be postmarked on or before 30 July 1995. FIU is an Equal Access/Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF SAN DIEGO Developmental Biologist

The University of San Diego (USD), Department of Biology, invites applications for a **TENURE-TRACK POSITION** in Biology endowed by the Fletcher Jones Foundation and anticipated to begin in the fall of 1996. The University seeks applicants in the field of Developmental Biology with at least four years of university-level teaching experience and a record of productive research. Teaching responsibilities include courses with laboratory in developmental biology and in molecular biology. USD is an independent Catholic university whose primary aim is teaching excellence. Active scholarship is integral to this aim, and the candidate is expected to have an ongoing research program that has the potential for undergraduate involvement. Applicants should submit a curriculum vitae, a brief statement of teaching philosophy and research interests, and three letters of recommendation by September 15, 1995, to: Chair, Department of Biology, University of San Diego, 5998 Alcalá Park, San Diego, CA 92110-2492. USD is an Affirmative Action/Equal Opportunity Employer. Women and minorities are particularly encouraged to apply.

UNIVERSITY OF OXFORD JOHNS HOPKINS UNIVERSITY BALTIMORE BIOMODELING OF THE HEART

Industry-funded **RESEARCH ASSOCIATE** and **POSTDOCTORAL FELLOWSHIPS** are being set up to join teams of D. Noble (Oxford) and R. Winslow (Johns Hopkins) in 3D modeling of electrical and mechanical properties of the heart. Ph.D. and strong background in programming (ideally on parallel architecture computers) required; basic knowledge in cardiac physiology of advantage. The work will involve medium-term working visits to the overseas partner lab. Salary commensurate with background and experience. Please send curriculum vitae and names of three referees to either: Denis Noble, University Lab of Physiology, Parks Road, Oxford OX1 3PT UK or Raimond L. Winslow, Department of Biomedical Engineering, The Johns Hopkins University School of Medicine, 720 Rutland Avenue, Baltimore, MD 21205 USA.

POSTDOCTORAL POSITION available immediately. Investigation of raf/MAPK and MEKK/SEK signaling and regulation of collagen and cytokine receptor gene transcription during hepatic fibrogenesis. Model uses hepatic mesenchymal cells (Ito cells) (JBC, 268: 25132; 270:3642). Molecular biology experience required. Mail/FAX curriculum vitae, and the names of three references to: Dr. Bernard Davis, Department of Medicine, University of Chicago, MC4076, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 312-702-2182. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the biology of cellular responses to hypoxia and the effects of pharmacologic modulating agents of the hypoxic response. Experience in gene expression or signal transduction is desirable. Studies will be conducted in tumor cell lines *in vitro* and in immunodeficient mice. Send curriculum vitae with references to: Dr. Peter O'Dwyer, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

POSITIONS OPEN

MOLECULAR BIOLOGIST OVERSEAS OPPORTUNITY

POSTDOCTORAL FELLOW/Experienced Technologist. Duke University Medical Center (DUMC) is accepting applications for a research position in its mycobacteriology research unit in Vitoria, Brazil. Responsibilities will include refinement of nucleic-acid amplification procedures for mycobacteria, application of molecular approaches to speciation, and comparative evaluation of research-based and automated molecular assays. Set in a moderately sized city in coastal Brazil, the collaborative U.S./Brazilian research unit is involved in technology transfer, diagnostic development, and clinical trials. The applicant will join the research unit in Brazil after orientation and training in the United States.

Candidates must have an advanced degree in molecular biology or significant bench experience. Knowledge of Portuguese or Spanish preferable but not mandatory. Position funded for at least two years. Applications accepted for review immediately.

Dr. Mark Perkins, telephone: 55-27-335-7204 (-7206 FAX) in Brazil, or through Janet Routten, DUMC Division of Infectious Diseases, Box 3867, Durham, NC 27710. Telephone: 919-684-2660; FAX: 919-684-8902; Internet: mark@npd1.ufes.br.

POSTDOCTORAL POSITION in Cellular and Molecular Neurobiology—The Department of Neurobiology has postdoctoral positions available to study various aspects of molecular, cellular and developmental neurobiology. Some major areas of interest are cell-cell and cell-substratum adhesion molecules, neurite outgrowth and nerve regeneration. Specific studies include: analysis of overexpression, mutation or deletion of adhesion molecules in animals, analysis of genes such as Hox and Pax, that control the expression of adhesion molecules and their subsequent roles in the formation of morphogenetic pathways during neural development, identification of signal transduction pathways and the gene programs activated by adhesion molecule binding. Applicants should have a strong background in cellular and/or molecular biology. Send curriculum vitae and three letters of reference to: Dr. Gerald M. Edelman, Chairman, Department of Neurobiology, The Scripps Research Institute, 10666 North Torrey Pines Road, SBR14, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.

SIGNAL TRANSDUCTION

A **POSTDOCTORAL POSITION** is available immediately to study regulation of Ras function in yeast. Applicants should possess a Ph.D. with a strong background in molecular biology and yeast genetics. Send curriculum vitae and three references to: Dr. Roymarie Ballester, Department of Biological Sciences, University of California at Santa Barbara, Santa Barbara, CA 93106. The University of California is an Equal Opportunity/Affirmative Action Employer. Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986).

POSTDOCTORAL POSITION PATHOGENESIS OF TUBERCULOSIS

Available August 1, 1995. Candidate should possess a Ph.D. in microbial genetics/physiology. Prior experience in the molecular biology and enzymology of *Mycobacterium tuberculosis* is required. Please send (or FAX) a curriculum vitae, description of research experience, and the names, addresses and telephone numbers of three references to: Dr. Daniel J. Hasset, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524. FAX: 513-558-8474.

POSTDOCTORAL POSITION available immediately. Molecular and biochemical investigation of airway remodeling and the selective roles of growth factor and neuropeptides. Experience in molecular biology and/or gene expression of enzymes/proteins required. FAX curriculum vitae with three references to: Dr. D. M. F. Murphy, Pulmonary Medicine Department, Deborah Heart and Lung Center, Browns Mills, NJ 08015. FAX: 609-735-1472. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION. A research position is available for an experimental hematologist to investigate the effect of *ex vivo* expansion culture techniques on hematopoietic stem cell proliferation and homing. A recent Ph.D. or M.D. with experience investigating stem cell proliferation at the cellular and molecular level is required. Specific background in stem cell selection and culture and molecular biological techniques (PCR and FISH) is preferred. Send curriculum vitae and three letters of reference by July 15, 1995, to: Dr. Catherine Verfaillie, University of Minnesota, Box 480 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455. The University of Minnesota is committed to Equal Employment Opportunity and Affirmative Action.

POSTDOCTORAL POSITION

POSTDOCTORAL POSITION available September 1, 1995, in laboratory studying bacterial motility and chemotaxis. Knowledge of bacterial genetics or physiology, molecular biology, or protein biochemistry preferred. Salary commensurate with experience. Send curriculum vitae and three letters of reference to: Michael Manson, Department of Biology, Texas A&M University, College Station, TX 77843-3258. Texas A&M is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN IMMUNOLOGY

St. Jude Children's Research Hospital

POSTDOCTORAL POSITION available immediately to study the effect of bacterial superantigens on the immune response to virus. Applicants should have a Ph.D. or M.D./Ph.D. Experience in cellular immunology and/or virology, using murine experimental models, is desirable. Send curriculum vitae, a statement of research interests, and the names, addresses, and telephone numbers of three references to: Dr. Marcia A. Blackman, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer. We provide a smoke-free environment.

POSTDOCTORAL POSITIONS

Two positions available immediately to participate in ongoing immunological and molecular biology studies on vaccine development against the human pathogen, *Trypanosoma cruzi*. Training in cellular immunology and molecular biology is required and experience in protein purification is desired. Send curriculum vitae, statement of research interests and names of three referees with telephone numbers to: Dr. Jerry Manning.

Two positions available immediately to study the structure-function relationships in proteins or cellular mechanisms of Alzheimer's pathogenesis. A strong background in biochemistry, molecular biology or cell biology is preferred. Please send curriculum vitae, and the names of three referees to: Dr. Charles Glabe, Department of Molecular Biology & Biochemistry, University of California, Irvine, CA 92717. FAX: 714-824-8551.

The deadline for applications is December 31, 1995.

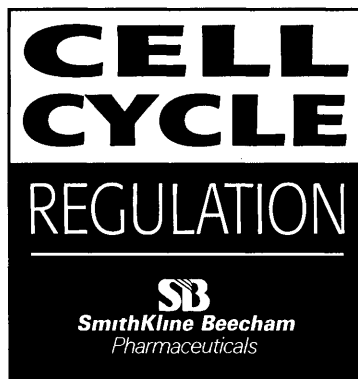
The University of California is an Equal Opportunity/Affirmative Action Employer, committed to excellence through diversity.

TUFTS MEDICAL SCHOOL Neuroscience

POSTDOCTORAL POSITION: Available immediately to work on information processing in the olfactory system using a combination of molecular biological and physiological methods. Molecular biological experience required; physiological/computational experience desired. Please send curriculum vitae to: John S. Kauer, Ph.D., Neuroscience, Tufts Medical School, 136 Harrison Avenue, Boston, MA 02111. FAX: 617-636-0476; Email: jkauer@pearl.tufts.edu.

POSTDOCTORAL FELLOWSHIP in Cartilage Biology and Aging. Position available starting July 1, 1995, to study the effects of aging and osteoarthritis on the chondrocyte response to IGF-1. This position is part of a multidisciplinary program on aging and is supported by a National Institute on Aging training grant. Experience in cell culture, biochemistry, and basic molecular biology is desired. Applicants must have a doctoral degree and U.S. citizenship or permanent resident status. Please send a curriculum vitae and three letters of reference to: Dr. Richard Loeser, The Bowman Gray School of Medicine of Wake Forest University, Medical Center Boulevard, Winston-Salem, NC 27157. Wake Forest University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

SmithKline Beecham Pharmaceuticals Announces The Eighth In Its Series of **U.S. RESEARCH SYMPOSIA**



November 6 – 7, 1995

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TOPICS:

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- 1. Regulation of the Eukaryotic Cycle**
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 - 4. Transcriptional Regulation**
 - 5. Apoptosis**

SPEAKERS:

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Dr. Gerald A. Evans
Dr. Calvin Harley

Dr. Marc W. Kirschner
Dr. James Ihle
Dr. Peter M. Lansdorp
Dr. David Lane

Dr. John C. Lee
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**U.S.- Israel
Opportunities for Collaborative Research**

The U.S.-Israel Binational Science Foundation (BSF), established by the United States Government and the Government of Israel, is an additional link in the long tradition of scientific cooperation between the two countries. The distinguishing feature of the BSF, as compared to past funding programs, is the joint participation and equal responsibility of both governments in financing, management and decision-making activities.

The purpose of the BSF is to promote and support cooperation between the United States and Israel in scientific and technological research. The annual budget of the BSF is derived from interest on an endowment fund established by equal contributions of both governments. The base of operations is in Israel.

BSF allocations are made in Israeli currency and primarily support the research performed in Israel. Proposals from the U.S. are welcome. The BSF is prepared to support some costs in the U.S.

Cooperative research is viewed by the BSF as that involving planned, active collaboration between Israeli and American scientists. The joint research program must be presented in the form of a single coordinated proposal in which the roles and tasks of the respective partners are clearly defined.

Cooperation may take the form of:

- joint research activities where interdependent projects of a single program are conducted in different laboratories and may involve shared funding or different sources of funding
- provision of research facilities, materials, equipment and/or services to cooperating scientists
- joint planning of research and evaluation of results
- exchange of personnel

Research proposals should be prepared by Israeli investigators in cooperation with American investigators or vice versa.

Applications should reach the BSF in Jerusalem no later than November 15th of each year. Information on application procedures and guidelines for participants can be obtained from the Office of Sponsored Research of most U.S. research institutions, or from the National Science Foundation, by calling the Africa, Near East and South Asia Program at (703) 306-1707 or electronically on INTERNET to: rmondesir@nsf.gov.



**United States Department of Agriculture
Cooperative State Research, Education, and
Extension Service (CSREES)**

Administrator, CSREES, Washington, DC

USDA is seeking to fill the position of agency Administrator for the Cooperative State Research, Education, and Extension Service. As Administrator, the incumbent is responsible for working with partners and customers to advance research, extension, and higher education in the food and agricultural sciences and related environmental and human sciences to benefit people, communities, and the Nation. Programs under the direction of the incumbent are financed by approximately \$980 million in Federal funds and accomplished through the efforts of approximately 400 CSREES employees. The incumbent reports directly to the Under Secretary, Research, Education, and Economics and has frequent contacts with top officials of USDA, other government agencies, cooperative extension services, state agricultural experiment stations, colleges and universities, private organizations and corporations, national and international institutions, Departments and Ministries of Agriculture in other nations, and members of Congress and their staffs.

This is a Senior Executive Service position. Salary ranges from \$97K to \$122K (including locality pay), commensurate with experience. A Ph.D. in a discipline related to the position is highly desirable. For information on the position, call Dr. Floyd Horn on 202-720-8885; for vacancy announcement/application procedures, call Gwen Donovan on 301-344-4622 by July 7, 1995.

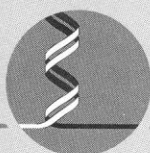
MACROMOLECULAR STRUCTURE

The Macromolecular Structure Laboratory (MSL), which currently includes crystallography (A. Wlodawer), NMR (A. Byrd), and drug design (C. Michejda) sections, is planning to expand by the addition of two research groups. One of the groups will be in **macromolecular crystallography**, and the other in **structural biochemistry**. The macromolecular crystallography group is expected to complement the current interests of this laboratory by studying structures of relevance to cancer and/or AIDS. The structural biochemistry group is expected to engage in independent research on some aspects of protein biochemistry and function, which could include in vitro studies, expression, and purification of proteins. Willingness to collaborate closely with the structure analysis groups is expected.

These positions will be filled at a group leader level (Staff Scientist, equivalent to assistant professor) and the initial appointments will be 5-year, with the potential for subsequent promotion to Senior Scientist. **Minimum qualifications** include 3 years of successful postdoctoral experience, as documented by high-quality publications. Each group will be provided with several postdoctoral/technical slots, and with generous startup packages. Easy access to shared equipment, which includes Siemens and Nonius area detectors, excellent computing and visualization facilities, as well as to a fermentation facility, will also be provided.

The MSL facility is located 45 miles north of Washington DC, in Frederick, MD, in a suburban setting with easy access to two major cities. We offer a full complement of benefits, competitive salary, and an excellent work environment. Please send CV with current salary and contact information for three references to:

Personnel Department/MSL
ABL-Basic Research Program
NCI-Frederick Cancer Research & Development Center
P.O. Box B, Building 428
Frederick, MD 21701-1201



EEO/MFDV

Research Scientist II

Genetic Therapy, Inc. based in the Washington, D.C. area, is a leader in the development of human gene therapy products for genetic and acquired diseases. Founded in 1986, GTI and its collaborators represent one of the largest groups of scientists dedicated to research and development in the field. We have an opening for a Research Scientist II in our Virology Department. The department has a focus on basic retroviral and adenoviral mediated gene delivery for human clinical trials treating metabolic disorders and lung disease. Individual will be part of a team that will be designing and evaluating new viral vectors for gene therapy with an emphasis on human bone marrow models. Applicant should have a Ph.D. in a scientific discipline and at least 2 years of relevant research experience or equivalent. Individual should have a strong scientific background in basic virology (retrovirology preferred), molecular biology, lymphokine biology, immunology and/or human genetics. GTI offers a stimulating and challenging environment in a rapidly growing company with competitive salaries and benefits. Fax or send resume to:



Genetic Therapy, Inc.
Attn: 34-012-7
938 Clopper Road
Gaithersburg, MD 20878
Fax: (301) 948-0503

*Genetic Therapy is an
Equal Opportunity Employer*

INDUSTRIAL BIOTECHNOLOGY

Energy BioSystems is a young, well funded, industrial biotechnology corporation specializing in the application of biotechnical systems to the chemical and energy industries. The company is expanding its R&D laboratories in the northern Houston suburb of The Woodlands, and is seeking personnel for its molecular genetics and process development programs. This is an opportunity to join a rapidly growing biotechnology company at an early stage in its development.

Research Scientist-Molecular Genetics

Duties include planning and executing research to identify, clone, determine function, etc., of genetic elements of multi-step biodesulfurization pathway & creatively use gene regulation/expression systems to deregulate pathway. **Requirements** of this position include a Ph.D. in Molecular Genetics, Biochemistry or related field and 2+ years experience. Strong knowledge of microbial biosynthetic/biodegradative pathways. Demonstrated ability to obtain results and a strong publication record. Team player able to interact meaningfully with multidisciplinary group.

Senior Research Engineer/Scientist

As a member of the process development team, the successful candidate will be responsible for planning and executing specific objectives within the overall plan for development of an engineered, microbially mediated process for the removal of organosulfur compounds from petroleum. **Duties** include hands-on operation of laboratory-pilot systems. Validate process model and optimize performance. Interact with pilot plant on scale-up experiments. Exercise independent judgment in developing methods, techniques, and evaluating criteria for obtaining results. **Requirements** of this position include a Ph.D. in biochemical/chemical engineering or biochemistry/chemistry and 3+ years of experience in a research and/or development environment. Successful candidate must have a strong knowledge of oil/water/solids separations and a demonstrated ability to obtain results and to interact meaningfully with multidisciplinary group.

Please send resume in confidence along with a cover letter stating the name of the position. Also send the names, addresses and telephone numbers of relevant references to:

Human Resource Manager
Energy BioSystems Corporation
4200 Research Forest Drive
The Woodlands, Texas 77381



No Phone Calls - EOE

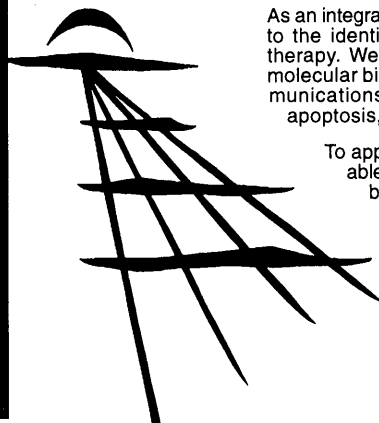
POST-DOCTORAL POSITION NMR SPECTROSCOPY

PhD applicants are sought for a position in the NMR Facility at Roswell Park Cancer Institute. The successful applicant will assist in the operation of NMR equipment (spectrometers include a WP-200, AM-400 and AMX-600, and several UNIX workstations with NMR related software.) Expertise in modern pulse sequences and applications of 3D techniques for determination of the solution structures of biological molecules is essential. The applicant will assist users in obtaining and analyzing NMR data, and insuring the design and implementation of new techniques to solve biochemical problems. Although the ability to repair the equipment is not required, familiarity with RF circuits and electronics, minor troubleshooting ability, and the ability to communicate with electronic service/maintenance representatives is necessary. Other duties include training students and postdocs to use NMR equipment, assist in teaching NMR courses, and some administrative responsibility.

Preference will be given to those applicants whose research interests complement existing programs. The position is immediately available for a one year assignment, renewable for subsequent years contingent on performance. Please send detailed curriculum vitae and arrange for three letters of reference to be sent to: **Dr. James L. Alderfer, NMR Facility, Biophysics Department, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263; Fax: (716) 845-8899; E-mail: jla@labtwo.med-buffalo.edu. AA/ M/F/H/V, EOE**

**ROSWELL
PARK**
CANCER INSTITUTE

Focus
on the
Future
at Pfizer



RESEARCH SCIENTISTS, Ph.D.

Pfizer Inc., a Fortune 100 pharmaceutical company, offers a world of challenge and opportunity where scientists can make a significant contribution to the research and development of exciting new products to be introduced in the coming decades...and the new century

BIOCHEMICAL IMMUNOLOGY

We seek a Biochemical Immunologist to join an active, multidisciplinary team of investigators in the discovery of novel agents for the treatment of immune-mediated diseases, including graft rejection, autoimmunity and immune deficiency. We require a Ph.D. in Immunology, Biochemistry or a related field; 3+ years' post-doctoral immunology research experience; and a record of independent and creative research in biochemical pharmacology of immune regulation, antigen processing/presentation, tolerance, or anergy.

MOLECULAR BIOLOGY-CANCER

As an integral part of a discovery research team, you'll be dedicated to the identification of molecular-based approaches to cancer therapy. We require a Ph.D., 2 plus years' post-doctoral work, molecular biology/cancer research experience, and strong communications skills. Study of signal transduction molecules, apoptosis, or angiogenesis a plus.

To apply to the above positions, please submit resume suitable for electronic scanning, i.e., eliminate italics, bullets, bolds, underlines and staples, laser printed preferred, to: **Employee Resources, AD#1021, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.**

We are an equal opportunity employer M/F/D/V



Central Research

POSITIONS OPEN

POSTDOCTORAL POSITION Catalytic RNA/RNA Splicing

POSTDOCTORAL POSITION available immediately to study RNA splicing by group I introns and RNP complexes (*EMBO J*, 12:3599, 1993). Ph.D. in biochemistry or molecular biology required. Strong nucleic acids background desirable. Send curriculum vitae, names of three references, and a letter describing research skills and interests to: **John M. Burke, University of Vermont, Microbiology & Molecular Genetics, 306 Stafford Hall, Burlington, VT 05405.** Email: jburke@moose.uvm.edu.

UNIVERSITY OF TEXAS MEDICAL BRANCH GALVESTON

A **POSTDOCTORAL POSITION** available immediately in Experimental Pathology Division will investigate the biochemical and molecular mechanisms of vascular injury by toxic substances; established NIH-funded laboratory within strong, collaborative University Toxicology Program. Send curriculum vitae with names and telephone numbers of three references to: **Paul J. Boor, M.D., University of Texas Medical Branch, 301 University Boulevard, Department of Pathology, Galveston, TX 77555-0605.** The University of Texas Medical Branch (UTMB) is an Equal Opportunity/Affirmative Action Employer. Minority/Female/Disabled/Veteran. UTMB hires only individuals authorized to work in the United States.

POSTDOCTORAL POSITION available immediately to study peptide design, structure and molecular dynamics. Research projects will require the use of automated peptide synthesis, magnetic resonance techniques (ESR and NMR), vibrational and optical spectroscopy. Applicants should have experience with two or more of these techniques and have a Ph.D. in Chemistry, Biochemistry or closely related field. Please send curriculum vitae and two letters of recommendation to: **Dr. Glenn L. Millhauser, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.**

POSTDOCTORAL POSITION in molecular and cell biology is available immediately to investigate the cell cycle regulation of membrane phospholipid metabolism. The research involves the application of contemporary techniques of molecular biology to dissect the mechanistic details of the interaction between the rate controlling enzyme in the pathway (CTP: phosphocholine cytidyltransferase) and the kinases, phosphatases and lipid regulators that influence its activity. Current research focuses on the expression of cytidyltransferase mutants in target cells to define the functional domains of the protein and examine the effects of de-regulated protein expression on phospholipid synthesis and cell growth. Candidates with a recent Ph.D. degree should apply by submitting a curriculum vitae, a short statement of research interests, reprints and the names of three references to: **Dr. Suzanne Jackowski, Department of Biochemistry, St. Jude Children's Research Hospital, Danny Thomas, Founder, 332 North Lauderdale, Memphis, TN 38105.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

The City of Hope National Medical Center invites applications for **POSTDOCTORAL POSITIONS** in:

The Gene Therapy Program has NIH funded programs focusing upon: i) gene transfer into hematopoietic cells, ii) the basic and clinical aspects of gene therapy for cancer and viral infections, and iii) development of adeno-associated virus (AAV) vectors. A Ph.D. and/or M.D. degree is required.

DNA repair/cell cycle regulation has positions available to study: i) UV-induced DNA damage and repair in mammalian cells, and ii) cell cycle-dependent transcriptional regulation. A Ph.D. plus experience in molecular biology techniques (such as PCR, DNA sequencing, protein-DNA interactions) is required.

Please send curriculum vitae, statement of research interests, and the names, addresses and telephone numbers of three references to: **City of Hope, Human Resources, Attn: KW, 1500 East Duarte Road, Duarte, CA 91010-3000.** FAX: 818-301-8448; Email: jysmineh@smplink.coh.org. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW MOLECULAR BIOLOGIST THE ROCKEFELLER UNIVERSITY Mechanisms of Energy Balance and Obesity

The research will focus on gene expression and candidate gene analysis in brain. Work will involve gene cloning, gene transfer and transgenic mouse technology. Applicants should have a strong background in molecular biology, biochemistry and/or molecular genetics. Interested individuals should send curriculum vitae and three letters of recommendation to: **Dr. Sarah F. Leibowitz, The Rockefeller University, 1230 York Avenue, New York, NY 10021.**

POSTDOCTORAL POSITIONS available in the Department of Urology at Case Western Reserve University pursuing identification of previously detected aberrant proteins excreted in the urine of individuals with kidney stone disease. In addition to investigating the role these proteins have in urolithiasis, a primary objective will be the development of an assay to monitor renal function in individuals with increased risk of stone formation. Experience in protein biochemistry including isolation and identification absolutely required, experience with antibody production desirable. Submit curriculum vitae, summary of relevant experience with names and addresses of three references to: **S. R. Marengo, Ph.D., Urology Research Laboratory, School of Medicine, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4931.** Equal Opportunity/Affirmative Action Employer.

A full-time **POSTDOCTORAL POSITION** is available immediately to study structure-function relationships of recombinant NMDA receptor channels utilizing patch-clamp electrophysiological techniques in transfected cells. Emphasis placed on receptor sites for endogenous modulators of receptor function. The applicant must hold a Ph.D., be experienced in molecular biological techniques and have an interest in ion channels. Please send curriculum vitae, relevant publications and names of three references to: **Elias Aizenman, Ph.D., Department of Neurobiology, E1456-BST, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261.** Email: redox+@pitt.edu. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study genetic alterations in pancreatic duct cancer. Experience in tissue culture and molecular biology including transfection, differential display and molecular cloning required to identify novel genes involved in duct carcinogenesis. Please send curriculum vitae, names of three references and a brief summary of research experience to: **Dante G. Scarpelli, Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.** FAX: 312-503-8240.

POSTDOCTORAL POSITIONS to apply advanced Optical Mapping approaches to human genome analysis (see *Science*, 262:110-114, 1993; *Nature Genetics*, 9:432-438, 1995; *PNAS*, 92:165-169, 1995; *C&E News*, May 15, 1995). Develop new approaches to sequencing, applications of new genotyping methodologies, whole genome approaches to restriction mapping and gene hunting. Send curriculum vitae, summary of past research, and three letters of reference to: **Dr. David C. Schwartz, New York University, W. M. Keck Laboratory for Biomolecular Imaging, Department of Chemistry, New York, NY 10003.**

POSTDOCTORAL SCIENTIST. Join new laboratory focusing on biochemical, biophysical, and structural characterization of integral membrane proteins and their interactions with small molecule effectors. Project involves large-scale purification and crystallization trials using a number of membrane-bound enzymes and transport proteins. Protein purification experience required; experience with membrane proteins, crystallization, or heterologous expression desirable. Send curriculum vitae, descriptions of experience and interests, and names/numbers of three references to: **Patrick J. Loll, Ph.D., Pharmacology, University of Pennsylvania School of Medicine, 3620 Hamilton Walk, Philadelphia, PA 19104-6084.** FAX: 215-573-2236; Email: loll@pharm.med.upenn.edu. Equal Employment Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWS I/II Children's Hospital Oakland Research Institute

Children's Hospital Oakland Research Institute is recruiting two **POSTDOCTORAL FELLOWS**, each with a recent doctorate degree and a strong background in molecular biology. One candidate will join a well-established, NIH-funded red cell biology and lipid biochemistry group. Studies will involve the characterization of proteins involved in membrane phospholipid turnover utilizing molecular approaches. The second candidate will join a study of molecular mechanisms of gene regulation by hormones. This NIH-funded program utilizes mutant and transgenic mice to study the multi-hormonal activation and repression of the β -glucuronidase gene. Interested candidates should direct inquiries or applications, including a curriculum vitae and the names of three references to: **Frans A. Kuypers, Ph.D.** for the first position and to **Gordon Watson, Ph.D.** for the second, **Children's Hospital Oakland Research Institute, 747 52nd Street, Oakland, CA 94609.** Applications will be accepted until the positions are filled. Equal Opportunity Employer.

POSTDOCTORAL POSITION immediately available to study the molecular biology of HIV and other viral gene expression by various transcription factors and cytokine mediated signal transduction. Experience in cell and molecular biology or protein chemistry is necessary. Send curriculum vitae, names of three references, research background and interests to: **Dr. Ranjit Banerjee, Department of Microbiology & Immunology, New York Medical College, Valhalla, NY 10595.** An Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the structure and motion of proteins with the Atomic Force Microscope. Experience with protein purification and activity analysis is essential. The successful candidate will be a talented biochemist or molecular biologist who looks forward to the challenge of learning Atomic Force Microscopy. No experience with Scanning Probe Microscopy or physics is necessary. Interested candidates should send curriculum vitae, research experience and names of three references to: **Professor Paul Hansma, Department of Physics, University of California, Santa Barbara, CA 93106.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP

Available immediately for recent Ph.D. (must be American citizen or permanent resident) to develop transgenic mice with structural or functional knockouts of genes involved in trichloroethylene-induced cancers. Must have molecular biology training and training in, or willingness to learn techniques for generating transgenic mice. Send curriculum vitae and names of three references to: **James S. Norris, Medicine/Rheumatology, MUSC, 171 Ashley Avenue, Charleston, SC 29425.** FAX: 803-792-7121. Email: jim.norris@smtpgw.musc.edu. Medical University of South Carolina is an Equal Opportunity Employer.

RESEARCH SCIENTIST/POSTDOCTORAL POSITIONS available immediately to investigate molecular and physiologic regulation of colonic ion transport including novel Cl-dependent Na-H exchange (*JBC*, 270:11051, 1995). Ph.D. with strong background in molecular biology required. Salary commensurate with experience. One position requires U.S. citizenship or permanent residency. Send curriculum vitae, summary of research interests and names of three to four references to: **Dr. Henry J. Binder, Yale Medical School, 333 Cedar Street, New Haven, CT 06520.** FAX: 203-785-7273. Yale University is an Equal Opportunity/Affirmative Action Employer.

The University of Chicago invites applications for a **RESEARCH ASSOCIATE** (with rank dependent on qualifications) in the Department of Medicine, Section of Hematology/Oncology and Committee on Clinical Pharmacology. Applicants should have a Ph.D. or Pharm.D. with knowledge and experience in drug metabolism and/or pharmacokinetics.

Please send letter and curriculum vitae to: **Mark J. Ratain, M.D. or Eileen Dolan, Ph.D., University of Chicago, 5841 South Maryland, MC 2115, Chicago, IL 60637.**

Tenure-Track And Postdoctoral Opportunities.

Listed below are some of the outstanding research training opportunities that are currently available at the National Institutes of Health.

Tenure-Track Positions Assistant Professor Equivalent

Cell Biology of the Nucleus Richard D. Klausner, MD

A position is available to establish an independent, tenure-track research program for the investigation of the biology of the nucleus that would complement ongoing research in gene regulation and cell biology. Applicants with an outstanding record of scientific achievement should submit a *curriculum vitae*, a detailed statement of research interests, selected publications, and the name of three references by September 1, 1995. Cell Biology and Metabolism Branch (OE-85), NICHD, Building 18T, Room 101, 18 LIBRARY DR MSC 5430, BETHESDA MD 20892-5430.

Developmental and Molecular Immunity John B. Robbins, MD

An opportunity is available to establish an independent research program in an area of synthetic polysaccharide chemistry. A state-of-the-art facility provides magnetic resonance spectroscopy and GC mass spectroscopy. Applicants with a strong record of scientific achievement, with emphasis on medically-important polysaccharides, should submit a two-page statement of research interests, selected publications and three letters of recommendation within six weeks of the publication of this advertisement. Laboratory of Developmental and Molecular Immunity (OE-85), NICHD, Building 6, Room 424, 6 CENTER DR MSC 2720, BETHESDA MD 20892-2720.

Postdoctoral Positions

Basic Aspects of Gene Regulation Richard J. Maraia, MD

Examination of mechanisms involved in regulating RNA polymerase III-transcribed genes is underway. Roles of RNA-binding proteins and RNA 3' end formation are investigated in this context (*Mol Cell Biol* 14:2147). Related studies examine expression of the class of human retrotransposons known as Alu (*Mol Cell Biol* 15:2109). Modern biochemical and molecular methods are essential. Laboratory of Molecular Growth Regulation (OE-85), NICHD, Building 6, Room 416, 6 CENTER DR MSC 2753, BETHESDA MD 20892-2753.

Developmental and Molecular Biology of Inner Ear Doris K. Wu, PhD

A position is available to study the development and morphogenesis of the inner ear. The focus of the project will be to identify genes expressed during early otocyst development and to test the functions of these genes utilizing retroviral vectors and various transplantation techniques. Candidates with training in molecular biology or developmental biology preferred. Laboratory of Cellular Biology (OE-85), NIDCD, 5 Research Court, Room 2B34, Rockville, MD 20850.

Molecular and Cellular Toxicology Lance R. Pohl, PhD

The molecular and cellular basis of toxicities caused by reactive metabolites of endogenous molecules and drugs are being examined. Current studies involve the isolation, cloning, and characterization of cellular targets of toxic reactive metabolites and the elucidation of both immune and non-immune-mediated mechanisms of toxicity caused by chemically altered cellular products. Each problem is approached using modern techniques of chemistry, biochemistry, immunology, cellular biology, and molecular biology. Applicants should have less than five years of postdoctoral experience. Laboratory of Molecular Immunology (OE-85), NHLBI, Building 10, Room 8N115, 10 CENTER DR MSC 1760, BETHESDA MD 20892-1760. E-mail: lrpohl@helix.nih.gov.

Vitamin D Receptor Imaging Julia Barsony, MD, PhD

The mechanism of early events during vitamin D receptor (VDR) activation is being studied using computer controlled video imaging, as well as biochemical and molecular biological techniques. VDR translocation with novel fluorescent ligands, protein kinase C translocation, changes in intracellular calcium and cGMP levels are being measured in normal and in mutant cells. A strong background in UNIX/PC environment, image processing, and system integration is desirable. Applicants must have less than five years of postdoctoral experience. Laboratory of Cellular Biochemistry and Biology (OE-85), Building 8, Room 422, 8 CENTER DR MSC 0850, BETHESDA MD 20892-0850. E-mail: jul@helix.nih.gov.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.cu.nih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "7,Even,1". When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJLI" for account number.

The Postdoctoral Research Fellowship Opportunities catalog, which describes intramural laboratories at the NIH, is also available by request. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (<http://www.nih.gov>). When connected, select *Research Opportunities at the NIH*. If you would like to request a catalog or have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, 301-402-1603, Fax 301-402-0483.

To Apply

If you hold a doctoral degree (e.g., PhD, MD/PhD, MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

Office of Education

The NIH is an Equal Opportunity Employer

CALIFORNIA CAREER OPPORTUNITIES

The J. David Gladstone Institutes, University of California, San Francisco.

The Institute of Cardiovascular Disease

Positions available in the labs of:

David A. Dichek, M.D.: *Postdoctoral Fellow:* A position is available for a Ph.D. or M.D. with a strong background in molecular biology and biochemistry. The project involves gene transfer into blood vessels to elucidate pathways of gene regulation and vascular lesion development. Gene therapy is also a major interest of the laboratory. Experience in virology and with viral vectors would be an asset.

Robert W. Mahley, M.D., Ph.D. and Robert V. Farese, Jr., M.D.: *Postdoctoral Fellowship:* Generate animal models of cholesterol and lipoprotein metabolism using gene targeting in embryonic stem cells. Applicants should have Ph.D. or M.D./Ph.D., strong background in molecular biology, and interest in atherosclerosis and neurobiology.

John Taylor, Ph.D.: *Postdoctoral Fellowship:* Training in the use of transgenic rabbit technology to investigate the roles of specific apolipoproteins in cardiovascular disease. This position involves learning techniques in generating transgenic rabbits, transgenic expression vectors, and in the analysis of lipoprotein metabolism. Experience in biochemistry and experience with laboratory animals helpful.

Karl Weisgraber, Ph.D.: *Postdoctoral Fellowship:* Study of structure and function of apolipoprotein E as it relates to heart and Alzheimer's disease. Experience or background in site-directed mutagenesis, recombinant protein production, protein structure and function, and physical biochemistry is highly desirable.

The Institute of Virology and Immunology

Positions available in the labs of:

Mark A. Goldsmith, M.D., Ph.D.: *Postdoctoral Fellowship:* (1) Study structure/function relationships in cytokine receptors that regulate growth, differentiation and function of lymphocytes. Will use molecular and biochemical approaches to investigate mechanisms of specificity and receptor subunit sharing in transmembrane signaling. May employ tissue culture, *in vitro* and *in vivo* model systems of normal and disease states. (2) Study interactions between lymphocytotropic viruses and receptor-dependent signal transduction pathways in target cells. Will use tools of molecular virology and immunology to investigate the contributions of transduced cellular genes to the viral life cycle and pathogenicity, as well as the influences of infection on normal cellular signaling and regulation. May employ both tissue culture and animal models.

Mike McCune, M.D., Ph.D.: *Director, Preclinical Antiviral Development:* Conduct *in vitro* and *in vivo* experiments on antiviral compounds, manage administration of department (interviewing, supervising, reports, budgets, etc.), serve as chief liaison for scientific/operational matters, facilitate/assist in grant contract application process, develop biosafety program for work with HIV. Required: MD, Ph.D. or equivalent; supervisory experience; and 4 or more years of lab experience in preclinical development of antiviral compounds. Management of government grants and contracts highly desirable.

Candidates should possess an M.D. or Ph.D. in molecular biology, biochemistry, immunology or related field. Competitive salary and benefits. Send C.V. and names of three references to: **Science Recruitment; HR Department; J. David Gladstone Institutes, P.O. Box 419100; San Francisco, CA 94141-9100 or Fax to: 415-826-3708.**
EOE/M/F/V/D.

REGENERON PHARMACEUTICALS, INC.

BIOINFORMATIC ANALYST - An experienced scientist will be responsible for computational and molecular software systems. Responsibilities will include the analysis of DNA and protein sequence data, including the results of sequence and motif searching. We seek an individual with MS/Ph.D. with an in-depth knowledge of computational analysis and interpretation of DNA sequences and protein analysis. Skills required include data management, client server technology in a UNIX-Mac environment and algorithm design and implementation.

REGENERON PHARMACEUTICALS, INC. is a leader in the development of therapeutic agents for neurodegenerative and traumatic nerve diseases seeks ambitious, career-oriented individuals interested in joining a team involved in cutting edge research. REGENERON is located in a modern facility in a suburban setting with ready access to the cultural and business centers of New York City. Please send your resume, along with salary requirements to: BIN DV, Regeneron Pharmaceuticals, Inc., Human Resources Dept, 777 Old Saw Mill River Road, Tarrytown, NY 10591. EOE/M/F/H/V

CALIFORNIA CAREER OPPORTUNITIES

Molecular Biology

QIAGEN Inc. is a rapidly growing biotechnology company committed to excellence in the development and marketing of innovative products for molecular biology research. We are seeking highly motivated and talented individuals to join our team.

Technical Service Specialist

Responsible for answering technical inquiries concerning our products and their applications, as well as customer and sales force training. Applicants must have broad experience in current molecular biology techniques and outstanding verbal and written communications skills. BS/MS degree in molecular biology or related discipline and 2+ years of laboratory experience in molecular biology is desirable. Based at our Los Angeles headquarters. Ref. No. TSS695

We offer competitive salaries, benefits, including relocation assistance, and a challenging, high-growth environment. For immediate consideration, please send a resume and salary history to:

QIAGEN Inc.
Attention: Ref. No. TSS695
9600 De Soto Avenue
Chatsworth, CA 91311
Fax: 818-718-2056



The Department of Microbiology and Molecular Genetics and the Department of Medicine at the University of California, Irvine are jointly seeking applicants for faculty positions at the Assistant or Associate Professor level, depending upon qualifications. As part of our ongoing effort to expand our program in molecular pathogenesis, we are soliciting applicants who have demonstrated superior talent and productivity in the area of molecular mechanisms of microbial pathogenesis. His/her previous work should have been judged by peer review to have been scientifically rigorous and clinically relevant, and he/she should have been successful in obtaining sufficient funds from peer-reviewed grants to support these efforts. The latter can include postdoctoral fellowship support for Assistant Professor candidates.

Candidates must have an M.D./Ph.D. or M.D., and board eligibility in Infectious Diseases is required. The successful candidate will be expected to participate in teaching and research conferences in both departments.

Please send curriculum vitae, summary of research interests and three letters of reference to:

Dr. Rozanne M. Sandri-Goldin
Search Committee Chair
Department of Microbiology and Molecular Genetics
College of Medicine
University of California
Irvine, CA 92717-4025

The University of California at Irvine is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

ANNOUNCEMENT

GRANT PROGRAM

Molecular Devices Corporation offers a limited number of equipment grants to both U.S. and International academic/government institutions performing basic research in mammalian cell biology. The intent of this grant program is to provide academic/government researchers access to the Cytosensor® Microphysiometer technology at a substantially reduced cost, thereby enabling them to make novel discoveries using the Cytosensor System, with the ultimate goal of publication.

Briefly, the Cytosensor System is the latest tool for studying the physiological consequences of receptor activation; it has been shown to be particularly useful for drug discovery and signal transduction research. The System can monitor receptor-mediated responses from living cells in minutes, providing functional dose responses in just a few hours. Receptor activation can be studied even without previous knowledge of the signal transduction pathway.

For a comprehensive information package including guidelines for grant submittal, scientific publications, Application Notes, Technical Bulletins and a Reference Guide please contact:



**Molecular
Devices**

Molecular Devices Corp.
1311 Orleans Drive
Sunnyvale, CA 94089
PH: (408) 747-3545
FX: (408) 747-3602

Deadline for Grant Submission is August 1, 1995

RESEARCH SCIENTISTS

HYBRITECH Incorporated, located in San Diego, is a leader in the research, development and marketing of diagnostic products utilizing monoclonal antibody technology. We have several challenging opportunities for experienced Research Scientists to support and lead the efforts of our Research, Development and Operations teams.

RESEARCH SCIENTISTS OPERATIONS

Our Operations Division has openings on the Manufacturing Technical Support Team for individuals who will lead troubleshooting investigations of manufacturing process issues and direct enhancement projects and validation efforts. The ideal candidates for these positions will have a Ph.D. in Biology, Biochemistry or Immunology with 0-3 years' industry experience or a BS/MS with a minimum 10 years' experience. Excellent interpersonal and communication skills, along with a proven ability to work effectively on teams are required.

Job Code: OPS/DM/SM/6-95

ASSAY DEVELOPMENT SCIENTIST

This person will work in a multi-disciplinary team environment leading projects in the development of new products for immunodiagnostic assays. The successful candidate will be involved in all aspects of the developing and manufacturing processes. Requires a Ph.D. in Biochemistry, Biology, or equivalent experience. Strong technical, communication, teamwork and leadership skills are required. Experience in the development of immunoassays on microplates is desirable.

Job Code: ADS/MD/SM/6-95

HYBRITECH offers a stimulating work environment and competitive salaries and benefits. Please indicate the appropriate Job Code on your CV or resume and forward to: **HYBRITECH Incorporated, Human Resources Dept., P.O. Box 269006, San Diego, CA 92196-9006; FAX: (619) 621-4415.** We are committed to and value diversity in our workforce/EOE.



CYTOKINE SIGNAL TRANSDUCTION RESEARCH

As a recognized leader in the field of intracellular receptor and STATs technology, Ligand Pharmaceuticals is successfully developing small molecule drugs for the treatment of human disease. Our recent insights into the role of transcriptional regulation mediated by JAK/STAT signaling pathways have led to novel drug discovery approaches and a number of strategic partnerships that will enable us to exploit these exciting opportunities. Come join us and contribute your expertise as a key member of our expanding Cytokine Signal Transduction Group.

RESEARCH SCIENTISTS

You will be part of an integrated project team focused on understanding cytokine signal transduction at a molecular level. You will need a Ph.D. in Molecular Biology, Cell Biology or Biochemistry and a minimum of 2 years' postdoctoral experience. Expertise in the areas of transcriptional regulation, SH2/SH3 domain interactions, tyrosine kinases and tyrosine phosphatases is highly desirable.

ASSISTANT SCIENTISTS

You will study mechanisms of cytokine-regulated gene expression, employing a variety of biochemical and cellular/molecular biological techniques, including DNA cloning and sequencing, immunochemistry, mammalian cell culture and transfection, and reporter gene assays. You will need a B.S. and/or M.S. degree in Molecular Biology, Cell Biology or Biochemistry and at least 4 years' experience in a laboratory setting.

Ligand's cutting-edge research, continual clinical progress and strategic alliances with several large pharmaceutical companies provide an excellent setting for you to make a significant scientific impact as part of our research team. Located in San Diego, one of the world's foremost biomedical research centers, we are pleased to offer a vigorous scientific environment along with a highly competitive compensation package, comprehensive benefits and stock options. For consideration, please fax or mail your c.v. and a letter detailing your expertise and position of interest, to: **Ligand Pharmaceuticals Inc., Attn: MS, 9393 Towne Centre Drive, San Diego, CA 92121, fax (619) 535-3906.** As an equal opportunity employer, we proudly encourage workforce diversity.



LIGAND
PHARMACEUTICALS

Postdoctoral Position, Molecular Virology

Positions are available to study the molecular pathogenesis of influenza virus. The research involves interactions between viral and host gene products in virus assembly or host range restriction of the virus. The candidate will receive training in state-of-the-art molecular and immunological techniques, including *reverse genetics*, that are being used to address these questions. **SJCRH** offers competitive salaries and fringe benefits. Interested individuals should send their curriculum vitae and the names of three references to



Dr. Yoshihiro Kawaoka
Dept. of Virology and
Molecular Biology

**St. Jude Children's
Research Hospital**

332 N. Lauderdale • P.O. Box 318
Memphis, TN 38101-0318

*An equal opportunity, affirmative action employer.
Women and minority candidates are encouraged to apply.*

The Trait & Technology Development Group of Pioneer Hi-Bred International, Inc. is seeking applicants to join our team in the area of Analytical Biochemistry. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment.

SENIOR RESEARCH ASSOCIATE, PROTEIN ANALYSIS (JOB #1390-D)

This person will join a laboratory that is responsible for analysis of proteins in both transgenic and non-transgenic crop plants. The specific focus of this position will be on grain trait modification, and the successful candidate will be expected to manage and participate in routine analysis projects as well as implement a research program to develop improved approaches and technologies for the analysis of proteins in seeds. A high degree of interaction with molecular and cell biologists will be required.

EDUCATION/EXPERIENCE: Minimum qualifications are a M.S. degree or equivalent in biochemistry or molecular biology plus 2 years of relevant experience; or a B.S. degree plus 4 years of relevant research experience. Experience in protein analysis/biochemistry is essential (immunoassay experience is very desirable). Experience with transgenic plant analysis, particularly of seed proteins is preferred. Computer skills, statistical analysis skills, and supervisory experience are highly desirable.

Please send resume with both cover letter and envelope indicating job name and number by July 11, 1995 to: Dawn M. Meyer, Pioneer Hi-Bred International, Inc., P.O. Box 1004, 7300 NW 62nd Avenue, Johnston, IA 50131-1004. Applications received after closing date will be reviewed if a candidate has not been identified. We are an Equal Opportunity Employer.



PIONEER HI-BRED INTERNATIONAL, INC.

VICE PRESIDENT FOR RESEARCH

The Association of American Medical Colleges seeks a Vice President for Research reporting directly to the president as a member of the executive staff. Areas of responsibility of the Division of Research encompass development of research policy relating to all sectors of the research enterprise, including basic biomedical research, clinical research, behavioral research, and health services research. The Division develops AAMC positions on such issues as assessment of needs and policies governing research training; issues related to the financing and management of research and the research infrastructure, including plant, equipment, human subject regulations, the use of animals, and the recovery of research costs; technology transfer; scientific integrity; and relationships between academic medical centers and industry. The incumbent has lead responsibility for the program and activities of the Council of Academic Societies, the component of the AAMC governance representing medical center faculty through 92 professorial and specialty organizations. The Division also provides staffing for the Advisory Panel on Biomedical Research. Candidates should possess an M.D. or Ph.D. and have a strong background as an investigator. Experience at an academic medical center and knowledge of the National Institutes of Health (e.g., through service on study sections or committees) are desirable. Applications, including C.V. and bibliography, will be received through August 15, 1995. Send applications to:

Jordan J. Cohen, M.D.
President
Association of American Medical Colleges
2450 N Street NW
Washington, D. C. 20037-1126

ENVIRONMENTAL EDUCATION/COMMUNICATION

The University of Michigan School of Natural Resources and Environment invites applications for a full-time, tenure-track position in Environmental Education/Communication at the **ASSISTANT PROFESSOR** rank to be filled by September 1996. The candidate must have a doctorate in the social or natural sciences with demonstrated research interest and ability in environmental education and communication. A successful candidate's research would focus on knowledge-based interventions with respect to environmental or resource issues. The acquisition, sharing, effectiveness, or impact of resource/environmental information would all be appropriate aspects of this area of study. The settings for such research can include individual, community, corporate, and/or organizational contexts. Teaching as well as research excellence are expected. Responsibilities: teaching a minimum of three courses annually, developing a strong conceptually-focused research program, directing interdisciplinary graduate research, and supervise doctoral and master's students including integrative, group-based master's projects. The School's programs are committed to the development of an integrative, interdisciplinary, problem solving approach. Send a cover letter with 1-2 page statement of research objectives and teaching interests, curriculum vitae (including publications), academic transcripts, and the names, addresses and telephone numbers of three references to **Chair, Environmental Education/Communication Search Committee, School of Natural Resources and Environment, 3512 Dana Building, The University of Michigan, Ann Arbor MI 48109-1115; (313) 764-2550**. Position will remain open until filled with review of applications beginning September 5, 1995. *The University of Michigan is a non-discriminatory, affirmative action employer.*

WYETH - AYERST RESEARCH

Wyeth-Ayerst Research, a major division of American Home Products Corporation, has opportunities available in Molecular Genetics, an expanding Core Technology Division located at the Princeton, New Jersey research center. This Division is responsible for the application of molecular genetics to the development of transgenic models of human disease.

MOLECULAR GENETICS

Our goal is to assemble a highly trained multidisciplinary team of enthusiastic and creative scientists whose expertise will synergize with investigators in other divisions to facilitate the application of molecular genetics to drug discovery in Cardiovascular Disease, Diabetes, CNS Disorders, Oncology, Infectious Diseases and Women's Health.

Each staff member is expected to have dual training: in molecular genetics and in a discipline related to an area of therapeutic interest.

Ph.D. POSITIONS

Veterinary Pathology/ Comparative Medicine

This pathologist will conduct the characterization of transgenic animal models of human disease produced by the Division. The position requires a degree in veterinary pathology or its equivalent; substantial background in the anatomy and pathology of rodents; demonstrated ability in the analysis and interpretation of pathology/histology data; experience with state-of-the-art techniques utilized in the analysis of transgenic animals (in situ hybridization, RNA, DNA and Protein blotting, immunocytochemistry, etc.); and supervisory experience. **Position #1269.**

Central Nervous System

This senior individual will be the Molecular Genetics liaison to the Division of CNS Disorders and will have responsibility for the initiation and conduct of transgenic animal-based projects with that Division. The position requires fundamental training and a proven track record of excellence in research in neuroscience; graduate and postdoctoral training in molecular genetics; experience with transgenic animal and/or embryonic stem cell technology; and supervisory experience. **Position #1201.**

Oncology

This senior individual will be the Molecular Genetics liaison to the Division of Oncology/Immunology and will have responsibility for the initiation and conduct of transgenic animal-based projects with that Division. The position requires fundamental training and a proven track record of excellence in research in Oncology; graduate and postdoctoral training in molecular genetics; experience with transgenic animal and/or embryonic stem cell technology; and supervisory experience. **Position #1214.**

Infectious Diseases

This senior individual will be the Molecular Genetics liaison to the Division of Infectious Diseases and will have responsibility for the initiation and conduct of transgenic animal-based projects with that Division. The position requires fundamental training and a proven track record of excellence in research in infectious diseases; graduate and postdoctoral training in molecular genetics; experience with transgenic animal and/or embryonic stem cell technology; and supervisory experience. **Position #1269B.**

B.S./M.S. POSITIONS

Microinjectionist

This Senior Molecular Biologist position requires training and experience in the techniques involved in the production of transgenic models including DNA microinjection, embryonic stem cell manipulation, surgery, cryopreservation of embryos, molecular biology and animal husbandry. **Position #1181.**

Senior Molecular Biologists

These three positions provide molecular biology support to the Division of Molecular Genetics. Training in the techniques of molecular genetics, and experience with transgenics and/or embryonic stem cell technology, are required. **Position #1184.**

Histology/Pathology Technician

This Research Assistant supports the analytical efforts of the veterinary pathologist described above. Technical expertise in tissue preservation, tissue sectioning, histochemistry, and molecular methods such as in situ hybridization, RNA, DNA and Protein blotting, are required. **Position #1183.**

B.S./M.S. positions require a minimum of 3 years relevant experience.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements and Position # of interest to: **Wyeth-Ayerst Research, Human Resources, CN 8000, Princeton, NJ 08543-8000.** Or you may fax your resume directly into our centralized Research resume database at (610) 989-4854. Principals Only. Equal Opportunity Employer, M/F/D/V.



Leading the way for a healthier world.



Postdoctoral Positions

Diagnostic Development Branch

National Center for Human Genome Research National Institutes of Health

Postdoctoral research positions are available for individuals interested in mammalian genetics and genome analysis.

Dr. Eric Green:

*Human Chromosome Mapping and Sequencing;
Isolation of Genes Associated with Inherited Diseases*

Dr. Mark Hughes:

*Single Cell Molecular Genetics; Prenatal and
Preimplantation Diagnosis; Reproductive Medicine*

Dr. David Ledbetter:

*Molecular Cytogenetics and Human Development;
Genomic Imprinting*

Dr. Thomas Ried:

*Human and Mouse Molecular Cytogenetics;
Biology of Tumor Progression*

Candidates should possess an M.D. and/or Ph.D. and have <5 years of postdoctoral experience. Please send a C.V. and the name of 3 references to:

Dr. Eric Green, NCHGR, NIH, 9 Memorial Dr., MSC 0945, Bethesda, MD 20892. FAX: 301-402-4735. The NIH is an Equal Opportunity Employer.

1995/1996 CaP CURE AWARDS

CaP CURE, the Association for the Cure of Cancer of the Prostate, has the goal of finding a cure for advanced prostate cancer and is soliciting proposals for its 1995/1996 funding year.

Applications (3-5 pages, 4 copies) are for basic research, clinical investigations or a combination and must be relevant to the treatment of advanced prostate cancer. Please append NIH format bibliography and identify sources of current funding, if any. We particularly encourage interdisciplinary collaborations between basic scientists and clinicians. Awards range from \$50,000-\$200,000 and are competitively renewable annually. Applications are accepted from individuals with/without institutional affiliation. (For-profit companies are not eligible.) Application deadline: August 15, 1995. Notification is expected by October 1, 1995.

Submit applications or requests for information to:

CaP CURE
1250 Fourth Street, Suite 360
Santa Monica, CA 90401
Phone: (310) 458-2873
Fax: (310) 458-8074

THE UNIVERSITY OF TEXAS AT AUSTIN

seeks applicant for the position of

DIRECTOR OF THE MARINE SCIENCE INSTITUTE

The Marine Science Institute is a research and teaching facility located on the Gulf of Mexico at Port Aransas, Texas. The Texas coastal zone, which includes vast lagoons, wetlands, estuaries and the warm waters of the gulf to the edge of the Continental Shelf, provides a rich environment supporting research in marine sciences. The Institute has excellent modern facilities including 180,000 square feet of laboratories, a library, a conference center, and visitor housing, as well as several research vessels including the R/V LONGHORN, a member of the UNOLS fleet. The Institute functions in conjunction with the Department of Marine Science, one of 12 academic units of the College of Natural Sciences of The University of Texas at Austin. The Department offers programs leading to the M.A. and Ph.D. in Marine Science and currently includes 15 faculty and 30 graduate students. In addition, approximately 85 scientific and support staff participate in the diverse research projects at the Institute.

The Director is the chief executive officer of the Institute and is expected to provide vision and leadership in research as well as to administer the academic and research programs of the Institute, and to communicate with the private sector. He or she also serves as Chairperson of the Department of Marine Science and holds the Nancy Lee and Perry Bass Regents Chair in Marine Science, an endowment for support of the research endeavors of the Institute. The Director reports to the Provost of The University through the Dean of the College of Natural Sciences.

We are seeking a congenial, dynamic leader with outstanding abilities in research, administration, and communication. Candidates with these qualities and an interest in promoting the diverse research and academic activities of the Institute are urged to apply. The successful candidate must qualify for appointment to the rank of Professor with tenure in the Department of Marine Science.

Candidate selection will begin September 15 and the search will remain open until an appointment is made. Applications should include a letter of interest, curriculum vitae, and the names and addresses of five references. This material should be sent to the Office of the Dean, College of Natural Sciences, The University of Texas at Austin, Austin, Texas 78712.

The University of Texas at Austin is an equal opportunity and affirmative action employer.

BIOLOGICAL R&D

Manufacturer of animal health products currently has openings for the following positions in Biological R&D:

Clinical Research Scientist: requires a DVM or Animal Science degree, 3 to 5 years experience in the animal health industry or academia working on product based projects, knowledge of immunology and biologicals, contacts with USDA, and international regulatory knowledge desired.

Clinical Research Scientist: requires a DVM or Animal Science degree, 3 to 5 years experience in the animal health industry of academia working on product based projects, good knowledge of FDA, GLP requirements for pharmaceuticals, some international experience desired.

Immunoenhancement Project Leader (Scientist): requires a degree in biological sciences, immunology, biochemistry, or biopharmacy, 3 to 5 years in academia or experience in the pharmaceutical/chemical industry, must have a successful project management track record in working with adjuvants and/or immunostimulants and/or slow release mechanisms, good knowledge of computers and statistics, experience in the animal health industry or academia is desired.

Virology Project Leader: requires a degree in biological sciences with emphasis on microbiology, 3 to 5 years experience in animal or human health industries, a proven record of successful project management, experience with large animal diseases with emphasis on cattle, computer experience (particularly word processing), and good knowledge of statistics.

New Technology Liaison Manager: requires a degree in biological sciences and masters degree or doctorate in an area of molecular biology or a masters degree in business or a business area, bench scientist with a proven track record including project management, good managerial people skills, experience in negotiation of technical contracts with third parties including commercial terms, ability to think and plan strategically in a Biological R&D environment.

Administrator, Biological R&D Records: requires a minimum of high school certificate plus experience in office management, library and records administration, degree or diploma(s) in office management or library techniques desired, 3 to 5 years in positions of increasing responsibility, excellent computer skills including graphics, and ability to conduct literature searches.

Excellent compensation package offered. To apply, send resume and salary requirements to:

Vice President, Human Resources
Boehringer Ingelheim Animal Health, Inc.
2621 N. Belt Highway
St. Joseph, MO 64506

Equal Opportunity Employer

SCIENTIST

Molecular Diagnostics

SmithKline Beecham, a worldwide leader in the pharmaceutical industry, has an opening for a scientist in our Molecular Diagnostics Department.

The selected candidate will work in close contact with several departments and outside collaborators to develop new diagnostic markers and assays for use in clinical settings. Assays developed will include human genetic diseases and cancer markers. The successful candidate will carry tissue culture cell lines to provide preliminary samples and controls for diagnostic assay development and will optimize DNA or RNA sample preparation, reverse transcription and PCR conditions for assays. Other responsibilities include optimizing sample detection methods and evaluating new methods as they become available, as well as validating diagnostic assays in-house with clinical samples.

Qualifications must include a BS or MS degree in Biochemistry or related field with 2-4 years experience in DNA and RNA isolation, preferably from tissue and/or blood samples and in PCR, RT-PCR and basic biochemical techniques such as gel electrophoresis.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, send your resume to: SmithKline Beecham Pharmaceuticals, Job Code H5-0096, PO Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

Sales Account Manager

Get Out of the Lab.....and Stay in Science

Apply your knowledge and skills in a new way. As our Sales Account Manager, represent the contract research and biosafety testing of Quality Biotech, a leading international biotechnology service company.

You'll use your science degree to assume full responsibility for Quality Biotech's interaction with clients and prospects in your assigned territory. Ongoing duties will include maintaining contact with current clients and maximizing sales of testing services to those clients, opening up new accounts, preparing testing proposals for clients and prospects as well as generally serving to enhance our company's presence and reputation. A BA/BS in Biological Science or Chemistry is required. Advanced degree with training in virology, molecular biology or cell biology and prior experience in sales/marketing is preferred. Position requires 25-50% travel.

We offer health benefits, 401(k) and Flexible Benefits plans. Please fax or send resume and salary requirements to: Quality Biotech Inc., Human Resources-AM695, 1667 Davis Street, Camden, NJ 08104, (609) 342-8078 (fax). EOE, M/F/D/V.



Quality Biotech®
Biotechnology Testing Services

DCRT

Division of Computer Research and Technology National Institutes of Health Bethesda, Maryland

The Division of Computer Research and Technology (DCRT), Office of Computational Bioscience (OCB) is seeking to expand its research program in Computational Biosciences. We seek both a

SENIOR LEVEL RESEARCH SCIENTIST

(roughly equivalent to the associate to full professor level)

and a

JUNIOR LEVEL RESEARCH SCIENTIST

(Postdoctoral Fellow to Assistant Professor)

to assist in this effort.

Major Duties and responsibilities: At the senior level, the selectee will conduct original research in the application of computational methods to current problems in biology and medicine, utilizing new and novel algorithms and a wide variety of computing platforms (as appropriate) ranging from personal workstations to massively parallel supercomputers, to address significant problems in computational biosciences (e.g. one or more of the following: rational, structure-based drug design, quantum chemistry, computational molecular biology, clinical and laboratory 3-D image processing, linkage analysis, and/or other computationally challenging problems). Selectee will conduct an independent research program, collaborate with computer scientists, engineers, biophysicists, biologists and biochemists from DCRT and throughout the National Institutes of Health, and contribute to the support of related computing resources. At the lower level, the selectee will assist in these efforts.

Qualifications Required: Doctoral degree in computational molecular biology, computer science, computational chemistry, biomedical engineering, or related field; ability to collaborate effectively with others as peers in a multidisciplinary environment. At the senior level, the selectee must also have several years of independent research experience in areas specifically related to those identified above and demonstrated ability to provide intellectual leadership to the field.

Starting salary range for a senior researcher is between \$51,557 and \$111,839 based upon training and relevant experience. The starting salary range for a junior researcher is \$29,898 to \$43,356. This position may lead to career tenure. Applicants should send curriculum vitae, bibliography, and statement of experience and research plans to:

**Computational Biosciences Initiative
DCRT Human Resources Management Office
Building 12A Room 3013
12 South Drive MSC 5644
Bethesda, MD 20892-5644**

**All applications must be received by August 31, 1995
in order to be considered.**

DCRT is an Equal Opportunity Employer
Applicants with disabilities are encouraged to apply.

Leadership in Process

Field Applications Specialists

The Applied Biosystems Division of Perkin-Elmer, a world leading manufacturer of scientific instrumentation, has two outstanding opportunities available for Field Applications Specialists to support Automated Fluorescent Genetic Analysis instrumentation. These positions are based in Houston, TX and the NY/NJ area.

The successful candidates will be based in their home office and will travel a multi-state area conducting technical training and seminars, pre-sales and applications consulting and troubleshooting.

Applicants should have a minimum of a BA/BS degree in Molecular Biology or a related discipline. An MS or Ph.D. is preferred. In addition, the positions require at least three years related laboratory experience and a thorough knowledge of Molecular Biology in Disease Research. Demonstrated proficiency in DNA sequencing, PCR and recombinant DNA technology is also required. You must be an enthusiastic self-starter, possess excellent verbal and written communication skills and be willing to travel.

Qualified candidates should send their resumes, in strict confidence to: **Mr. E. K. Hutton, Director, Human Resources North American Sales and Service, The Perkin-Elmer Corporation, 761 Main Avenue, Norwalk, CT 06859.**

We are an equal opportunity employer M/F/D/V

PERKIN ELMER

DIRECTOR - NATIONAL HEALTH RESEARCH INSTITUTE

Taipei, Taiwan, Republic of China

A National Health Research Institute (NHRI) was recently established by the Government of the Republic of China in Taiwan as a Foundation organization aimed at promoting medical, pharmaceutical, and health research and improving the health and well-being of citizens in the country. Its main missions include the coordination and integration of these research activities in the country, the performance of research on diseases important to the nation and on health policy, and the promotion of research on new products and technology. The Board of the NHRI has appointed a Search Committee to search for a Director for this new Institute.

The Director, who will be appointed by the Board, is responsible for the coordination and administration of all intramural and extramural activities of the Institute. The Search Committee is seeking nominations and applications of individuals qualified to serve as Director of the NHRI; nominations should have the consent of the nominee. Requirements for the position include a medical degree (M.D. or M.B.), outstanding research accomplishments in medical fields, working experience as a full professor or equivalent for at least 5 years, evidence of administrative and leadership abilities, familiarity with the Taiwan environment, and fluency in Chinese language.

Applications or nominations should consist of a cover letter and a complete curriculum vitae, including a list of publications and five representative reprints, as well as the names, addresses and telephone, FAX and/or e-mail numbers of six references. Review of applications and nominations will begin on July 15, 1995, and continue until a suitable candidate is recruited. Applications and nominations should be sent to:

Dr. Shu Chien
Institute for Biomedical Engineering
University of California, San Diego
La Jolla, CA 92093-0412
Telephone: 619-534-5195
FAX: 619-534-5453

National Institute of Allergy and
Infectious Diseases
National Institutes of Health

PROTEIN X-RAY CRYSTALLOGRAPHERS

A tenure-track position with intramural funding is available to conduct an original research program and to interact with other scientists within the NIH intramural program. Ph.D. or M.D. applicants should have a record of achievement in solving protein structures by X-ray crystallography. Salary commensurate with credentials and research experience.

Qualified and interested candidates should send curriculum vitae including names and addresses of three references to:

**John E. Coligan, Ph.D., Chief
Laboratory of Molecular Structure
NIAID/NIH
Twinbrook II, Room 103
12441 Parklawn Drive
Rockville, MD 20852-8190
Announcement No. PA-17**

Phone: 301-496-3213
Fax: 301-402-0284

U.S. Citizenship not required.
NIH is an Equal Opportunity Employer

Lawrence Greenwald POSTDOCTORAL FELLOWSHIP in Leukemia/Lymphoma Research



Fox Chase Cancer Center in Philadelphia is seeking applicants for a postdoctoral fellowship in molecular biology of the immune system. Candidates must have completed all doctoral degree requirements when they are appointed and have no more than two years of prior postdoctoral experience. Completed applications are due August 1, 1995, for an appointment beginning January 1, 1996.

The fellowship recipient should contact the faculty member in whose laboratory he/she wishes to work.

Participating faculty and research interests are: Control of V(D)J recombination—Dr. Melvin Bosma • B-cell development and genetics of functional B subsets—Dr. Randy Hardy • CD4+ lymphocyte development and differentiation—Dr. Kyoko Hayakawa • T-cell development—Dr. Dietmar Kappes • Function of Abelson subfamily protein tyrosine kinase—Dr. Gary Kruh • Chromosomal alterations and hematological malignancies—Dr. Joseph Testa • Retroviral-induced T-cell lymphomas—Dr. Philip Tsichlis.

For an application, contact Fox Chase Cancer Center, Postdoctoral Office, 7701 Burholme Avenue, Philadelphia, PA, 19111, call (215) 728-2467, or e-mail postdoc@fccc.edu.

FOX CHASE
CANCER CENTER

REPRODUCTIVE BIOLOGISTS

In association with the University Hospital, The University of Western Ontario's Department of Obstetrics & Gynaecology is seeking two Reproductive Biologists for its Division of Reproductive Medicine.

A Faculty level position is available for a Research Scientist with extensive Postdoctoral research in Reproductive Endocrinology and assisted reproductive technologies. The successful candidate will be appointed at an academic rank commensurate with experience, and will be expected to maintain a peer-review funded research program that contributes to the research endeavours of the Division of Reproductive Medicine. The incumbent will also participate in teaching at the graduate and undergraduate levels, and support the administrative functions of the department as requested.

A hospital-based Scientist position is also available for candidates who have experience with contemporary clinical and laboratory techniques used in a high volume IVF clinic. The successful candidate will be responsible for the day to day management of the Division's Reproductive Biology Laboratory, and will be expected to participate in both clinical and basic science research.

Applications together with a statement of research interests and three letters of reference should be submitted to Dr. J.K. Milne, Chair, Department of Obstetrics Gynaecology, c/o Human Resources, University Hospital, 339 Windermere Rd. London, ON N6A 5A5 by Friday, June 30, 1995.

Positions are subject to budget approval. In accordance with Canadian immigration requirements, this ad is directed to Canadian citizens and permanent residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals, including women, members of visible minorities, aboriginal persons, and persons with disabilities.

POSTDOCTORAL FELLOWSHIP

St. Jude Children's Research Hospital, a premier research center for children's catastrophic diseases and biomedical research, offers the **LEMEUL E. DIGGS ENDOWED FELLOWSHIP IN EXPERIMENTAL HEMATOLOGY**. The fellowship was established by the American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital to honor the contribution of Dr. Diggs to the investigation and treatment of sickle cell disease.

The fellowship is open to a junior investigator with an M.D. or Ph.D. degree who wishes to join a group studying the transcriptional regulation of the human β -globin locus and the use of gene transfer methodologies in the treatment of sickle cell disease.

Diggs fellowship awards are made for up to three years and are based on merit, recommendations and promise of a productive career in biomedical research. Stipends are highly competitive.

Application Deadline: 1 August 1995.

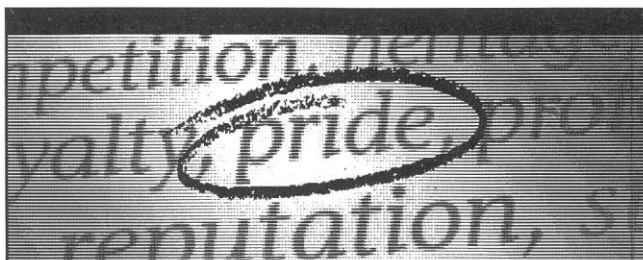
Award Notification: 15 September 1995.

Beginning Date: 1 January 1996 or after.

Send inquiries to:

Arthur W. Nienhuis M.D., Director
St. Jude Children's Research Hospital
P.O. Box 318
Memphis, TN 38101-0318

Equal Opportunity/Affirmative Action Employer



Another ingredient of a great career.

All the right elements in combination make for careers labeled "the best." At Miller Brewing Company, one essential ingredient is pride. Our people take pride in every facet of what we do. In our exceptional products. In an environment that is challenging and encourages risk-taking. In a work force that is diverse, talented and always driven towards quality.

Research Scientist

The Miller Brewing Company is searching for a creative research scientist who will provide expertise in brewing and fermentation on plant, pilot and laboratory scales. The selected candidate will participate in designing and conducting laboratory and pilot scale experiments related to fermentation performance, novel fermentations, capacity improvement, process flexibility, and product quality. You will be a member of a dynamic, self-directed work group, working in yeast physiology and fermentation.

The successful candidate must possess brewing and fermentation experience and a knowledge of yeast physiology; significant research experience is desired. Computer literacy is essential. Emphasis will be placed on communication and interpersonal skills and the ability to work in a team-based research environment.

If you have the ingredients to succeed here, send your resume for consideration to: **Miller Brewing Company, Corporate Staffing, Dept. CBR, 3939 W. Highland Blvd., Milwaukee, WI 53201-0482.**



Miller welcomes diversity's potential for excellence, and encourages interest from all candidates. EOE, M/F/D/V.

National Heart, Lung, and Blood Institute
National Institutes of Health / Public Health Service
Department of Health and Human Services

DIRECTOR EPIDEMIOLOGY AND BIOMETRY PROGRAM

The National Heart, Lung, and Blood Institute (NHLBI) invites applications for the position of Director, Epidemiology and Biometry Program, Division of Epidemiology and Clinical Applications. This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from the ES-1 to ES-4 pay level per annum (currently \$97,991 to \$113,180). A physician's comparability allowance up to \$20,000 may be applicable for candidates. A one year probationary period must be served by the individual selected if not currently or previously in the career SES.

The incumbent of the position of Director, Epidemiology and Biometry Program (EBP), shares full responsibility with the Director, Division of Epidemiology and Clinical Applications (DECA), in planning, conducting, coordinating and evaluating a national extramural research program focused on epidemiology.

Candidates must have the following **Mandatory Professional/Technical Qualifications**: have a degree in epidemiology and must meet the minimum educational requirements for Medical Officer, GS-602 (M.D. degree), as defined by the U.S. Office of Personnel Management in the Qualifications Standards for General Schedule Positions. Applicants must also have demonstrated knowledge of programs funded through grants and/or contracts, and have research management experience related to epidemiology of heart, lung, or blood diseases.

Applicants must possess experience and demonstrated competence to assume leadership responsibilities in the following **Mandatory Managerial/Executive Qualifications include the ability to:** 1) demonstrate leadership responsibilities in developing, implementing, and evaluating program goals; 2) design human resource strategies to achieve the organization's mission; 3) establish, implement and, adjust programs and policies; 4) acquire and administer financial, material, and information resources; and 5) negotiate with individuals and groups internally and externally.

Applicants deemed to be eligible will be evaluated by a Search Committee on the degree to which they possess the desirable qualifications of (1) additional professional/technical experience; (2) scientific reputation/peer recognition; (3) training and education and clinical experience and (4) honors and awards.

Applicants are required to submit an Application for Federal Employment, SF-171, Optional Application for Federal Employment, OF-612 (available at all Federal Job Information Centers and Federal Personnel Offices), or resume. In addition, submit a curriculum vitae and bibliography to the address below:

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE Personnel Office

Building 31, Room 5A28
9000 Rockville Pike
Bethesda, Maryland 20892
(301) 496-6477

Attn: Susan McPherson - HL-95-51

Applications must be postmarked no later than July 25, 1995.

ALL APPLICATION FORMS ARE SUBJECT TO THE PROVISIONS OF THE PRIVACY ACT AND BECOME THE PROPERTY OF DHHS.

Selection for this position will be based solely on merit with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, sexual orientation, or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer

LEADING THE MEDICAL COMMUNITY

The American Medical Association, the nation's largest and most influential physician member organization, seeks two dynamic experts to fill the following positions:

DIRECTOR Biomedical Science and Clinical Research

To enhance the AMA's role as a leading advocate of biomedical science and clinical research, you will help guide AMA policy development; represent the AMA at meetings; establish relationships with research and physician organizations; help develop practice standards in clinical research (incl. genetics); and monitor advances. Requires a proven record of speaking and publication, a doctorate in a health-science field (medical degree pref.), and 3+ years of postdoctoral medical or scientific experience with demonstrated advancement. Excellent analytical, organizational, writing and interpersonal communication skills are vital. Clinical research and policy development experience desirable. (Code: 2952-SZA)

SENIOR SCIENTIST Department of Drug Policy and Standards

You will plan and implement AMA activities related to drug/biologics policy and standards with emphasis on immunology, virology, infectious disease therapy and biotechnology products; devise plans to inform physician members, staff and the public on these topics; and represent the AMA at national meetings. Requires an MD, PHD in biomedical science or PharmD; knowledge of microbiology (especially virology), immunology and pharmacology as well as postdoctoral experience in academia, industry, or government. Excellent analytical, organizational, writing and interpersonal communication skills are vital. Record of publication is required. Demonstrated success in gaining grant funding desirable. (Code: 2927-SDB)

The AMA rewards expertise with a competitive salary and comprehensive benefits. If you're ready to take your place leading the medical community, please forward your resume, writing samples and salary history to: **Carol Sprague, Sr. Corporate Recruiter, Division of Placement, Dept. CES-(indicate position by entering Code), AMA, 515 N. State St., Chicago, IL 60610. EOE.**

American Medical Association

Physicians dedicated to the health of America

515 North State Street
Chicago, Illinois 60610



Project Director

The Fred Hutchinson Cancer Research Center invites applications for the position of Project Director for the Clinical Coordinating Center (CCC) for the Women's Health Initiative. This is a senior position at the Associate or Full Member (University of Washington - Professor) level.

The CCC provides statistical, data management, clinical and nutritional coordination for a large multicenter disease prevention trial with an associated observational study, spanning a project period of fifteen years. The clinical trial emphasizes heart disease, cancer, and fracture prevention by means of partial factorial design that involves hormone replacement, dietary modification and chemoprevention approaches. The Project Director will have key leadership responsibilities, both scientific and administrative, within the Women's Health Initiative. Candidates must have Ph.D. or M.D. degrees with training and expertise in public health related areas, and should have both clinical trials coordination and managerial experience. Academic appointment at the University of Washington is anticipated, depending on interests and qualifications. Please send a letter of interest, C.V. and names of four references by no later than July 31, 1995 to:

**Ross Prentice
Director, Division of Public Health Sciences
Fred Hutchinson Cancer Research Center
1124 Columbia Street MP-665
Seattle, Washington 98104**

The Fred Hutchinson Cancer Research Center and the University of Washington are equal opportunity/affirmative action employers. Both institutions are building culturally diverse faculty and strongly encourage applications from female and minority candidates.

Assistant Professors in Molecular Pathology Department of Laboratory Medicine and Pathology University of Minnesota

Two full-time annually renewable faculty positions in molecular pathology are available approximately August 1, 1995 for candidates with a Ph.D. degree in a biological science and a minimum of two years experience in the field of molecular biology and a research background in oncology or constitutional genetic disorders.

Successful candidates will serve in the Division of Molecular Diagnostics. This laboratory is rapidly growing, and among the most sophisticated clinical molecular diagnostic units in the country. We deliver comprehensive clinical molecular genetic testing service at the University of Minnesota and to an extensive regional and national network. We have received a number of national contracts for molecular genetic testing. The candidates will be involved in the development and implementation of new diagnostic tests, the technical oversight of clinical test performance and research studies related to activities of the clinical laboratory. Candidates will develop individually supported research in the broader field of molecular pathology and participate in collaborative studies with either investigators at the Academic Health System. Additional responsibilities will include didactic teaching and training of pathology residents, medical students, graduate students and postdoctoral fellows.

Deadline for receipt of applications is July 30, 1995. Applicants should send their curriculum vitae, names of three references and a brief synopsis of clinical and research activities to:

**Molecular Diagnostics Search Committee
attn. Marilyn Green, associate administrator
Department of Laboratory Medicine and Pathology
Box 609 UMHC
420 Delaware St. SE
Minneapolis, MN 55455**

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

Scientist-Ph.D. Molecular Biology

CYTOGEN Corporation, a leader in biotechnology, discovers, develops and markets products to treat cancer and other diseases. Having received FDA approval for products, we stand at the leading edge of biomedical achievement with patented technology that optimizes unique delivery systems for diagnosis and treatment.

We are seeking an individual to play a major role in the design, construction and testing of DNA constructs and viruses for the expression of therapeutic genes, and the discovery of new genes involved in intracellular signalling.

A Ph. D. in Molecular Biology, Cell Biology, Biochemistry, Microbiology or a similar field is required, along with a minimum of 3 years' relevant laboratory background. Strong interpersonal communication skills are essential.

Cytogen offers a competitive salary and excellent benefits. For consideration, please forward two copies of your resume in strictest confidence to Human Resources, CYTOGEN Corporation, 600 College Road East—CN 5308, Princeton, NJ 08540-5308. Equal opportunity employer m/f/d/v.

CYTOGEN
Corporation

MOLECULAR BIOLOGIST/Ph.D.

Wyeth-Ayerst Research is a major division of Fortune 150 American Home Products Corporation. This current opportunity is in the Oncology/Immunology Research Division in Pearl River, New York.

We have an opportunity for a molecular biologist with experience in the field of signal transduction to take a leadership role in expanding an established research group. Candidates should have a Ph.D. and a minimum of 5-7 years related experience. Industry experience is preferred, but is not essential.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Candidates may submit CV and three references to: **Wyeth-Ayerst Research, Human Resources Dept. 932, Bldg. 140, Rm. 224, N. Middletown Road, Pearl River, NY 10965. Or you may fax your resume directly into our centralized Research resume database at (610) 989-4854. Principals only. Equal Opportunity Employer, M/F/D/V.**



Leading The Way for a Healthier World

University of Texas Southwestern Medical Center at Dallas

Department of Microbiology Molecular Immunology Center

The Department of Microbiology and the Molecular Immunology Center invites applications for a tenure track Assistant Professorship. Candidates must hold the degree of Ph.D. and/or M.D. and have a minimum of two years of postdoctoral research experience. Our goal is to create a diverse and interactive research environment that includes individuals with expertise in all aspects of molecular immunology. The incumbent's research will complement the Departments's and Center's existing strengths in molecular immunology including the molecular biology of B cell development, lymphoid neoplasia, antigen processing, antigen recognition by T cells, and the biochemistry of lymphocyte activation.

We encourage applications from individuals who will develop strong, independent research programs in any area of molecular immunology, but who are also interested in an exchange of ideas and information among scientists taking diverse approaches to studying the normal immune system and its dysfunction in disease. Collaborations within the University and among the medical school faculty are extensive. A substantial package will be provided to start and sustain the laboratory of the successful candidate who will occupy newly constructed space in a recently completed research tower.

Applicants should send a curriculum vitae, a brief statement of research accomplishment and plans, and three letters of reference. We encourage women and minority candidates.

J. Donald Capra, M.D.
Chair, Search Committee
Department of Microbiology
Molecular Immunology Center
UT Southwestern Medical Center
6000 Harry Hines Blvd.
Dallas, TX 75235-9140

UT Southwestern is an Equal Opportunity/Affirmative Action Employer



FACULTY POSITIONS DEPARTMENT OF MEDICINE UNIVERSITY OF VIRGINIA

The Division of Gastroenterology and Hepatology is seeking applicants for two tenure-track positions (M.D. or Ph.D.) at the rank of Assistant Professor or higher. We seek individuals with significant post-doctoral experience and research interests relevant to mucosal immunology and biology of cytokines and cytokine antagonists using contemporary approaches, including molecular biology, genetic analysis, control of transcription and cell signalling. Qualified candidates should have demonstrated ability to attract or maintain extramural funding. The University of Virginia provides excellent research facilities in an exceptional environment. Centers for research in Immunology, Cancer Biology, Molecular Biology and Cell Signalling, Retrovirus and AIDS and Cardiovascular Physiology are present on campus. Applicants should send a curriculum vitae, a summary of present and future research interests, and two letters of recommendation to Fabio Cominelli, M.D., Ph.D., Chief, Division of Gastroenterology and Hepatology, Box 145, University of Virginia Health Sciences Center, Charlottesville, VA 22908. Affirmative/Equal Opportunity Employer.

DIRECTOR MIDWEST SCIENCE CENTER NATIONAL BIOLOGICAL SERVICE

The Midwest Science Center (formerly the National Fisheries Contaminant Research Center), National Biological Service, is seeking an individual for the position of Director. The Center, located in Columbia, Missouri, is an internationally respected research center with multi-disciplinary expertise in environmental toxicology, aquatic ecology, and environmental/analytical chemistry. In addition to the 33-acre Columbia facility, the Center also maintains field research stations in Jackson, WY, and Yankton, SD. The Director leads and manages the Center's scientific program and national and international research partnerships. Desired qualifications include a Ph.D. in biological sciences, chemistry, agriculture, natural resource management, or related disciplines and experience in leading a multi-disciplinary research program. The Columbia area offers a high quality of life with state-of-the-art medical facilities, progressive public school programs, strong university influences, and diverse recreational opportunities.

The salary range for this GS-15 position is \$70,482 to \$91,629. Interested candidates should contact Linda Goetting, National Biological Service, Midwest Science Center, 4200 New Haven Road, Columbia, MO 65201, (314)875-5399, or email linda_goetting@nbs.gov for details regarding application procedures.

All candidates will receive consideration without regard to age, race, religion, color, national origin, political affiliation, gender, or other non-merit factors.

Working Together, We Can Bring About A New Era In Drug Discovery.

Since 1888, Abbott Laboratories has been leading the way in breakthrough drug discoveries. Year after year, our pioneering research brings the latest health care products to people all around the world. Now, you can join us in one of the following positions, and help us deliver a new era of revolutionary drugs.

Neuroscience Research Group Leader

Leading a group of Ph.D. and associate scientists, you will work within a multidisciplinary project team investigating novel approaches to neuroprotection and cell death.

We require a Ph.D. in Biology along with 6+ years of postdoctoral experience in biochemistry, cell and molecular biology, or pharmacology. We also require research experience in neuropharmacology, preferably related to acute neurodegenerative diseases and epilepsy. A strong record of accomplishments as evidenced by publications and supervisory experience are essential. A background in pharmaceutical drug discovery research is preferred. (Job #EK73700)

Ph.D. Neuroimmunology

Working with our Neurodegeneration project team, you will investigate inflammatory cytokines as targets for the treatment of neurodegenerative diseases.

We require a Ph.D. in Immunology, Neurobiology, or Neuroimmunology along with 2+ years of post-doctoral experience. We also require proficiency in molecular cloning, cell culture, protein biochemistry or receptor signaling techniques, or enzyme assays. A background in cytokine regulation, expression, receptor signaling and function is desirable. (Job #CL65532)

Abbott provides an excellent salary and benefits package, including profit sharing and a stock retirement plan. We are located 30 miles north of Chicago. For consideration, please send your curriculum vitae with salary history (including Job #) to: **Jessica Wiley, D-583, AP6D-2, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action/Smoke-Free Employer.

ABBOTT LABORATORIES



Experience The Abbott Edge.

Health Care Research:

Women

Every year, SCIENCE devotes an issue to women in science. On 11 August 1995, we will take an in-depth look at a topic that has received a lot of attention: women's health. In this important cover story, SCIENCE goes beyond the popular myths and the rhetoric to examine questions such as:

- are women included in major research studies less frequently than men?
- has women's health been ignored by the medical establishment?
- what kind of research needs to be done to improve women's health?
- what are the health problems of women in developing countries?

This is an excellent opportunity to showcase your company as an ideal work environment for women and to confirm your company's commitment to women's health care research by placing a full page recruitment advertisement in this issue. Full page advertisements will receive extra visibility by being listed on an index attached to the covers of the issues distributed to the Association for Women in Science. In addition, full page recruitment ads will be grouped together in the issue and highlighted by a SCIENCE-sponsored advertisement listing all of the full page advertisers and saluting industry efforts to promote women in science and women's health care issues.

Don't miss this outstanding opportunity to feature your company's recruitment message in this once-a-year special issue!

Women's Health Care Research publishes: 11 August 1995.

Recruitment advertising space reservation deadline: 25 July 1995.

For advertising information, please call
Janis Crowley at (212) 496-7704
or fax to (202) 682-0816.

SCIENCE

EXECUTIVE DIRECTOR

Center for Science, Mathematics and Engineering Education

The National Research Council (NRC), the principle operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national, non-profit, non-government organization located in Washington, DC, invites applicants for the position of Executive Director for its newly created Center for Science, Mathematics, and Engineering Education (CSMEE). The incumbent will be responsible for the overall planning and management of the NRC's science, mathematics, and engineering education activities through its new center; all fundraising, administrative, and financial affairs with authority for independent action in achieving program goals of the Center within institutional policy and in consultation with the NRC Executive Officer and NRC Chairman; develop appropriate programmatic agendas and strategic priorities to achieve program objectives of the Center; identify current and emerging science, mathematics, and engineering education issues to be addressed by the Center; direct, review, and contribute to the writing of the final reports and publications; plan and present findings to sponsors and the broader professional/policy making community; oversee and coordinate the Center's technical, financial, reporting, and administrative operations in compliance with institutional policies and contract/grant requirements; identify sources of financial support and active fundraising; and collaborate with other NRC commissions and offices.

Applicants should have the following qualifications: Ph.D. or equivalent, preferably in science, engineering, science or mathematics education, or a related field; and at least ten or more years of experience in related research, program evaluation, and policy analysis, including demonstrated responsibility for and success in project management. Effective management skills, including staff supervision, administration of program financing and budgets, organization of project assignments and tasks, and oral/written communication skills required; and demonstrated knowledge of federal agencies and their procurement practices preferred. Please send resume/cv in confidence to: NRC/CSMEE, HA 450 (DG), 2101 Constitution Avenue, NW, Washington, DC 20418. EOE.





University College Dublin

An Coláiste Ollscoile Baile Átha Cliath

DEPARTMENT OF CHEMISTRY

One Permanent Post (Ref: 88/95)

Applications are invited for a full-time permanent academic post to commence in September 1995.

Applicants should have a PhD and a good research record and, preferably, some teaching experience.

The Department has an established NMR centre, including 270 and 500 Mhz instruments and seeks applicants with research specialisation in nuclear magnetic resonance spectroscopy.

The successful candidate will be expected to undertake undergraduate and postgraduate teaching duties, and to establish an active research group within the Department.

The appointment will be made at the level of either Assistant Lecturer or College Lecturer.

Closing Date: Not later than 5.00 p.m. on Thursday, 10 August 1995.

Prior to application, further information (including current salary scales) should be obtained from the **Personnel Office, University College Dublin, Belfield, Dublin 4, Ireland** (quoting above reference number). Telephone enquiries: (353 1) 706 1078 - direct line. Fax: (353 1) 269 2472.

UCD is an equal opportunities employer



University of Otago

Te Whare Wananga o Otago

New Zealand

SENIOR RESEARCH FELLOW / DIRECTOR, PROGRAMME FOR SENSORY SCIENCE RESEARCH (THREE YEAR FIXED TERM)

The Division of Sciences is developing a Programme for Sensory Science Research and seeks as Director, a Senior Research Fellow who combines a record of excellent science in one of the disciplines contributing to sensory science with a demonstrated capability to lead a multidisciplinary team in this important and growing area.

A recent analysis of needs for strategic research in Sensory Science identified the key benefits to New Zealand as well as the international importance of such research and the University of Otago is well placed to support such an activity with its unique blend of applied and pure scientific activity and its wide range of contributory disciplines. These contributory disciplines include Food Science, Human Nutrition, Chemistry, Clothing, Mathematics and Statistics, Physiology, Psychology, Biochemistry.

Salary will be within the Senior Research Fellow range \$NZ52,000 - \$NZ67,080 per annum at a level commensurate with the candidate's experience and research record. An exceptionally well qualified candidate may be considered for appointment beyond this level.

The Director will be expected to liaise with outside organisations to define research priorities, to coordinate projects using expertise within and outside the University, and to seek funding for the projects. The Director will also be expected to undertake his/her independent research programme.

Intending applicants should write to the Registrar, Dr D.W. Girvan, University of Otago, PO Box 56, Dunedin, New Zealand (fax 64-3-474 1607) for further information and details of the method of application.

Specific enquiries may be addressed to Professor J-P Dufour, telephone 64-3-479 9198; facsimile 64-3-479 7567, email jean-pierre.dufour@stonebow.otago.ac.nz.

Applications quoting A95/47 close with the Registrar on 31 July 1995.

Equal opportunity in employment is University policy.

The Queen's University of Belfast

LECTURESHIP IN AQUATIC ENVIRONMENTAL BIOLOGY

School of Biology and Biochemistry

This is a new post, tenable from 1 October 1995 to develop a strong research programme in aquatic environmental biology and to contribute to courses in the subject area at undergraduate and postgraduate levels. Current School research interests in this area centre on aquatic biodiversity, aquaculture, conservation and management of sea lochs, marine primary production and salmon fish population genetics.

Applicants must have an honours degree or equivalent in biological science or other relevant area; a PhD or equivalent in biological science; relevant experience of tertiary level teaching; research experience demonstrated by at least four high quality publications in one of interactions of environment, aquaculture and fisheries, aquaculture genetics, aquatic ecosystem function, management. Preference will be given to applicants with experience of quantitative, molecular, experimental or GIS approaches to these topics.

Informal enquiries to Professor A Ferguson (01232) 335786.

Salary scale: Lecturer Grade A: £15,154 - £19,848, or Grade B: £20,677 - £26,430 with eligibility for USS. Assistance with relocation as appropriate.

Further particulars are available from the Personnel Officer, The Queen's University of Belfast, BT7 1NN ((01232) 245133 ext 3044/3246 or FAX (01232) 324944/310629). Closing date: 8 July 1995.

The University is a charity, established in 1845 to advance education. Committed to an Equal Opportunities policy and selection on merit, it welcomes applications from all sections of the community. Under its affirmative action programme it particularly welcomes applications from women for academic posts.



The University of Zurich invites applications for a

Full Professorship (Senior Protein Crystallographer)

at the Institute of Biochemistry, University of Zurich. The ideal candidate should have an outstanding research record and a demonstrated ability to lead a highly productive research group at the forefront of structural biochemistry. Excellent opportunities for collaboration in all aspects of protein biochemistry exist within the Institute, the University and the Swiss Federal Institute of Technology, with macromolecular recognition being already designated as a future growth area. The candidate will be required to establish an X-ray crystallography facility and also participate in departmental teaching. The position will be available from April 1997. For further information concerning the position, please contact the Institute of Biochemistry, Tel: (+41 1) 257 55 11, Fax: (+41 1) 363 79 47. Applications should be prepared in accordance with the "Instructions for submission of applications", copies of which may be obtained from the Dean's Office, University of Zurich, Fax: (+41 1) 255 45 65.

Please submit applications by **31st July 1995** to the Head of the Search Committee, Professor Christian Bauer, Physiologisches Institut, Universität Zürich, Winterthurerstrasse 190, CH-8057, Zürich, Switzerland.

Lectureship in Environmental Chemistry

School of Environmental & Marine Science
Tamaki Campus

Vacancy UAC.599

The University wishes to appoint a Lecturer in Environmental Chemistry at its new Tamaki Campus, some 12km from the University's City Campus, to be involved in the development of teaching and research here. Currently there are three undergraduate chemistry courses taught at Tamaki with a strong environmental component and further courses are planned.

Research facilities are being established and the facilities of the Chemistry Department (including NMR, spectroscopic surface analysis, x-ray diffraction and thermal analysis instrumentation) are available.

Applicants should have a PhD and research and teaching experience. Candidates with an interest in any aspect of environmental chemistry will be considered.

Commencing salary will be established within the range NZ\$39,500 - NZ\$50,000 per annum.

Further information, Conditions of Appointment and Method of Application should be obtained from the Academic Appointments Office, The University of Auckland, Private Bag 92019, Auckland, New Zealand, phone 64-9-373 7599 ext 5097, fax 64-9-373 7023. **Three copies** of applications should be forwarded to reach the Registrar by **20 July 1995**.

Please quote Vacancy Number UAC.599 in all correspondence.

W B NICOLL, REGISTRAR



New Zealand

The University has an equal opportunities policy and welcomes applications from all qualified persons

THIS IS A SECOND ANNOUNCEMENT

U.S. - ISRAEL BINATIONAL SCIENCE FOUNDATION EXECUTIVE DIRECTOR

The U.S.- Israel Binational Science Foundation (BSF) was established in 1972 to support cooperative science research projects between U.S. and Israeli scientists. Research projects are funded from the interest on an endowment established in equal shares by the two Governments. The office of the BSF is in Jerusalem.

According to this 1972 agreement signed by the two Governments, the Board states the following regulations:

- (a) "The Executive Director shall be the chief executive officer of the Foundation. He shall be responsible for the operations and staffing of the Foundation. He shall set in accordance with the policies, directives and delegations of the Board.
- (b) The Executive Director shall be a person of outstanding ability, prominent in the scientific and administration field. He shall be appointed by the Board of Governors under a contract not exceeding three years with such compensation and under such terms and conditions as may be determined by the Board of Governors."

The candidate for Executive Director must be well acquainted with the Israeli and U.S. academic research systems and the usual proposal review procedures. He or she should have a proven scientific record, as well as administrative experience in the management of scientific research programs.

Curriculum vitae and letters of interest should be submitted by August 1, in the following manner:

U.S. applicants should send their material to:

Dr. Marcel Bardon, Director
International Programs
National Science Foundation
Arlington, VA 22230

Israeli applicants should send their material to:

Mr. Amnon Einav, Chief Scientist
Ministry of Energy and Infrastructure
234 Jaffa Road
Jerusalem, Israel

Applicants should be able to assume BSF responsibilities as soon as possible, but no later than February 1, 1996.

國立清華大學 生命科學院 徵院長

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Applications are invited for the position of Vice Chair - Research, beginning the fall 1995. Salary and rank will be commensurate with qualifications and experience. The Vice Chair - Research shall be a scientist of stature who is qualified to initiate and sustain the research policies of the Department and to achieve a high degree of collaboration among its divisions and research programs. The Vice Chair's creative role will include development of research endeavours of the Department so that it shall occupy a position of leadership in Canadian medical science that is competitive with international standards of excellence. The Vice Chair shall have the goal of promoting research training of the highest quality. The Vice Chair shall facilitate research that extends from the bench to the bedside and the community, in an environment that enriches the development of scientists within the Mental Health field. The application deadline is September 30, 1995. Interested applicants should send a letter of application and a detailed curriculum vitae to: **Dr. Paul Garfinkel, Department of Psychiatry, University of Toronto, 250 College Street, Toronto, Ontario, M5T 1R8**. In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. *In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.*

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RESEARCH FELLOW

The University of Colorado School of Medicine, Division of Gastroenterology has positions available for one or more years' training in basic or applied research related to gastrointestinal or hepatic pathophysiology. Applicants must have an M.D. or Ph.D. degree, and previous research experience is preferred. Contact: **William R. Brown, M.D., Division of Gastroenterology and Hepatology, University of Colorado School of Medicine, 4200 East Ninth Avenue, Campus Box B-158, Denver, CO 80262.** Telephone: 303-393-4678; FAX: 303-320-0608. *The University of Colorado is an Equal Opportunity Employer.*

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RESEARCH ASSOCIATE POSITION available to investigate the metabolism and mechanism of action of carcinogenic chemicals in mammalian and fish species. Ph.D. in biochemistry, bioorganic chemistry, biochemical toxicology, or pharmacology required. Experience in metabolite analysis desirable. Please send résumé and name of three references to: **Dr. H. Sikka, Laboratory of Environmental Toxicology and Chemistry, CERE, Science 261, State University of New York College at Buffalo, 1300 Elmwood Avenue, Buffalo, NY 14222.** Telephone: 716-878-5422; FAX: 716-878-5400.

RESEARCH STAFF POSITION

Chemistry Department, Princeton University has an opening for a senior **RESEARCH SCIENTIST** with extensive experience in the area of biophysical chemistry. The successful candidate needs to have extensive experience in EPR and ENDOR spectroscopies of transition metal containing metalloenzymes, particularly photosynthetic and redox enzymes. Send curriculum vitae to: **S. Greene, Chemistry Department, Princeton University, Princeton, NJ 08544.** *Princeton is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE. University of Maryland at College Park (UMCP), Laboratory for Global Remote Sensing Studies. Ph.D. in environmental sciences and/or information extraction from remotely sensed data required. UNIX experience advantageous. Projects relate to characterizing global land cover from satellite data. Send résumé before July 15, 1995, to: **Shunlin Liang, Department of Geography, University of Maryland, College Park, MD 20742, USA.** *UMCP is an Equal Employment Opportunity/Affirmative Action Employer.*

TECHNICAL SUPPORT POSITION

The Genetics Computer Group, Inc. (GCG) is seeking an additional member for its technical support staff to provide assistance to the world-wide community of biologists that use the GCG Wisconsin Sequence Analysis Package. The ideal candidate will have an advanced degree in molecular biology/biochemistry or related field, computer experience, and strong interpersonal and communication skills. Familiarity with the Wisconsin Sequence Analysis Package will be an advantage. Minimum starting salary is \$35,000 plus benefits and help with relocation costs if applicable. Send curriculum vitae with references to: **Genetics Computer Group, Inc., 575 Science Drive, Madison, WI 53711.** Telephone: 608-231-5200.

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SYMPOSIA

SYMPOSIUM: Therapeutic Antibody Technology 95 October 30 to November 1, 1995; Cathedral Hill Hotel, San Francisco, California. Speakers: C. Barbas, C. Borrebaeck, D. Burton, P. Carter, D. Charish, K. Chester, A. Griffiths, A. Grillo-Lopez, K. Hellstrom, A. Hiatt, H. Hoogenboom, T. Ishiguro, A. Jakobovits, K. Johnson, W. Marasco, G. Mark, J. Marks, S. Morrison, I. Pastan, A. Plückthun, L. Ostberg, J. Reno, M. Rosenberg, T. Scanlon, W. Stemmer, L. Weiner, I. Wilson. Abstracts due October 16, 1995. Organizers: J. Larrick, J. Marks. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

SYMPOSIUM: Translation and Stability of mRNA. October 8 to 10, 1995; Cathedral Hill Hotel, San Francisco, California. Speakers: E. Baker, H. Blau, R. Braun, A. Geballe, P. Green, J. Harford, J. Hershey, A. Hinnebusch, M. Katze, R. Lehmann, M. Mathews, D. Morris, R. Parker, S. Peltz, G. Read, T. Rouault, P. Sarnow, R. Schneider, A. Shyu, R. Silverman, N. Sonenberg, O. Uhlenbeck, S. Warren, M. Wickens. Organizers: J. Harford, RiboGene; M. Katze, University of Washington; J. W. Larrick, PAIMM. Abstracts due September 25, 1995. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

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MEETING

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Registration and abstract submissions are still being accepted for the fourth joint American Society for Cell Biology/European Molecular Biology Organization meeting "Cytoskeletal Proteins and Neurodegenerative Disease" at Robinson College, Cambridge, England, August 5-10. The biology and pathology of microtubule and intermediate filament proteins in normal and degenerating nervous systems will constitute major foci of presentations and discussions. For additional information and a call for abstracts contact: **Dorothy Doyle, telephone: 301-530-7153; FAX: 301-530-7139; Email: ddoyle@ascb.faseb.org.**

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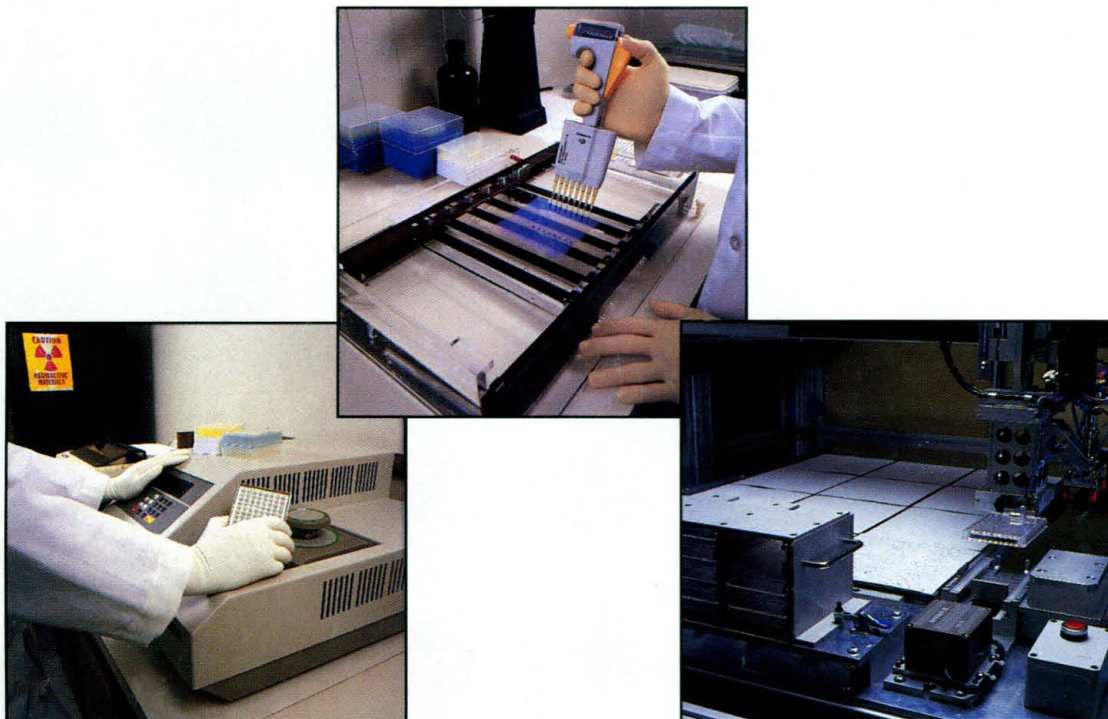
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