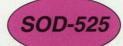


NEW ANALYTICAL TOOLS IN FREE RADICAL BIOCHEMISTRY



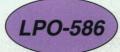
a spectrophotometric assay of SUPEROXIDE DISMUTASE



an immunoassay of **HUMAN MYELOPEROXIDASE** FOR

SPECIFIC REPRODUCIBLE **FAST**

ASSAYS



a colorimetric assay of LIPID PEROXIDATION

Available soon: plasma Se-GPx (EIA) GSH-400

a colorimetric assay of **GLUTATHIONE GSH**



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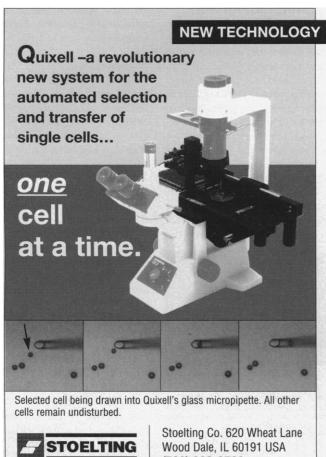
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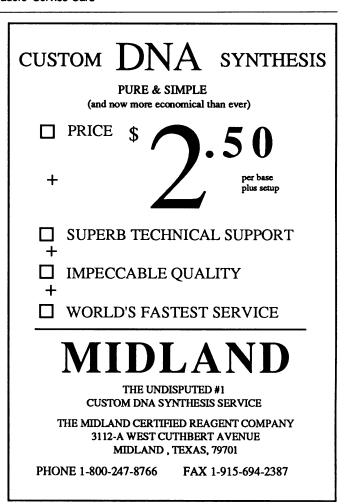
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PRODUCTS & MATERIALS

Light Microscopy Camera

The MicroCam SLR is a fully automatic, single-lens reflex, instant camera for photographing any specimen through a light microscope. MicroCam SLR combines low cost with a sophisticated ex-



posure and filtration control system to produce high-quality instant color and black-and-white prints with push-button ease. The camera attaches to a microscope by sliding its built-in ×10 magnification lens directly into the microscope's eyepiece tube or phototube. Weighing only 2.2 pounds with dimensions 8 by 7 by 7 inches, it can be moved from microscope to microscope to serve as the imaging system for an entire laboratory. Polaroid. Circle 140.

DNA Purification Kit

A kit for the rapid purification of DNA offers a high-speed protocol that produces good-quality plasmid DNA (no protein or RNA, small amounts of nicked and genomic DNA) and a slightly slower protocol that produces high-quality plasmid DNA enriched for supercoil. The kit contains a protein-binding membrane incorporated into a microcentrifuge cartridge. In the highspeed protocol, cells are resuspended, lysed, and precipitated. The precipitate is loaded into the cartridge and centrifuged directly into ethanol for 2 min. The potassium-SDS precipitate is retained in the cartridge. RNA and

protein bind to the membrane, whereas purified plasmid DNA is found in the ethanol precipitate. In the high-purity protocol, the potassium-SDS precipitate is centrifuged for 15 s and the supernatant is placed in a boiling water bath to denature the genomic and nicked DNA. The sample is then passed through the cartridge. which binds the protein, RNA, and denatured DNA. Supercoiled plasmid DNA passes through the cartridge and is precipitated. Advanced Genetic Technologies. Circle 141.

Rapid Probe Purification

A new kit for the rapid purification of end-labeled probes and random-primed probes features a patent-pending membrane incorporated into a microcentrifuge cartridge that efficiently binds single-stranded DNA but not mononucleotides, phosphate, or biotin. Labeled sample is loaded into the cartridge and centrifuged for 5 s to remove unincorporated label. After another 5-s spin to wash the membrane, purified product with >99% purity is eluted in 80 µl of TE. For random-primed probes, the sample is heat-denatured prior to purification on the cartridge and then added directly to the hybridization mix. Advanced Genetic Technologies. Circle 142.

Reference Manager Software

A new version of Reference Manager bibliographic software for Microsoft Windows has been released. In addition to the Windows interface, version 5.5 includes many other new features, such as enhanced bibliographic formatting and the ability to "cut and paste" formatted references into other applications. Databases created using the program are fully compatible with both Macintosh and DOS versions. Research Information Systems. Circle 143.

Research Immunoassays

A wide selection of enzyme immunoassays is available for eicosanoid, steroid, and cyclic nucleotide research. The format features a precoated 96-well detachable strip plate and ready-to-use reagents including a stable enzyme substrate, buffers, conjugate, and standard. Kits include lipoxin A₄, prostaglandin E₂, leukotriene B₄, testosterone, and cAMP and cGMP. Oxford Biomedical Research. Circle 144.

Instant Autoradiography

The InstantImager electronic autoradiography system electronically locates and measures radiolabeled macromolecules in gels, blots, membranes, thin-layer chromatography plates, tissue slices, and other two-dimensional samples. This new instant-imaging technology eliminates the use of x-ray films and storage phosphor screens from autoradiography work. Samples with sizes up to 20 by 24 cm are loaded directly into the system. An innovative Microchannel Array Detector instantly images and quantitates



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.

the distribution of radioactivity; the formation of autoradiography images can be followed continuously on a high-resolution cathode ray tube display. The Instant-Imager is 100 times faster than x-ray film exposure and 10 times faster than phosphor screen imaging. Packard, a Canberra Co. Circle 145.

Literature

The Peak is a bimonthly newsletter that features applications information, common technical questions, and other information on columns and media for high-performance liquid chromatography, with references and diagrams. TosoHaas. Circle 146.

A revised Electrophoresis Chemicals and Reagents Catalog includes an expanded range of reagents for DNA sequencing, oligonucleotide separation and purification, protein separation, and visualization of proteins and nucleic actids. An extensive line of buffer solutions is included. National Diagnostics. Circle 147.

Immunochemical Reagents and Equipment: 1993 Catalog contains 36 pages of immunoreagents and immunostaining products, including more than 80 monoclonal and polyclonal antibodies. Shandon Lipshaw. Circle 148.

ANONEWS: The Technology Newsletter of the Anorad Corporation is a free newsletter on precision positioning and motion control that includes articles on topics such as how laser, vision, and positioning technologies were combined to produce a "smart inspection station" as well as information on Anorad's products. Anorad Corp. Circle 149.

Cell Pathology Products: 1993 Catalog lists more than 250 readyto-use and concentrated antibodies, DNA probe test kits, and enhanced biotin-streptavidin detection systems for use in immunohistochemistry and in situ hybridization. BioGenex. Circle 150.

Science

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POSITIONS OPEN

ASSISTANT PROFESSOR—SUPERINTENDENT. 12-month, tenure-track position, initial appointment 60% research, 40% administrative. The position is at the Agricultural Science Center located fifteen miles north of Clovis, New Mexico. Ph.D. in appropriate field. Must be knowledgeable in irrigated and dryland production systems. Responsible for the development and implementation of a nationally competitive research program for solving relevant agronomic and horticultural problems. Supervise experimental work on improved dryland and irrigated farming systems including conservation tillage and water management. Will work independently on some projects but will also work with other faculty, staff and students in cooperative projects. Should qualify for graduate faculty status and publish research results in peer-reviewed journals. Work cooperatively with advisory committees, research, and extension at Las Cruces and other science centers, and agribusiness and producers of the area. Important to have ability and willingness to write and communicate orally to various types of audiences. Submit letter of application, current résumé, official transcripts, and the address of at least three references by August 23, 1993 (or until position is filled), to: Dr. LeRoy A. Daugherty, New Mexico State University, Agronomy and Horticulture Department, Box 30003, Department 3Q, Las Cruces, NM 88003. Telephone: 505/646-3406; FAX: 505/646-6041. New Mexico State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from minority representatives and women.

ST. LAWRENCE UNIVERSITY VISITING INSTRUCTOR OR ASSISTANT PROFESSOR INVERTEBRATE ZOOLOGISTDEVELOPMENTAL BIOLOGIST

The successful applicant will teach invertebrate zoology, developmental biology, and two other courses in the applicant's field of expertise. Ph.D. preferred. This position begins August 1993 and is a one-year appointment (possible renewal). Review of applications will begin July 6, 1993, and remain open until filled. Send curriculum vitae, three letters of reference, and statement of teaching interests to:

Dr. Thomas Budd Department of Biology St. Lawrence University Canton, NY 13617

St. Lawrence University is committed to fostering multicultural diversity in its faculty, staff, student body and programs of instruction. As an Equal Opportunity/Affirmative Action Employer, we specifically encourage applications from women, persons of color, and the disabled.

FLORIDA INTERNATIONAL UNIVERSITY, the State University of Florida at Miami, seeks two tenure-track ASSISTANT PROFESSORS: one in Wetlands Ecology and one in Wetlands Ecosystem Modeling. Successful candidates will develop undergraduate and graduate courses in their area of interest and pursue research in their specialty. Ph.D. and a vigorous research program in area of specialization required; postdoctoral training is preferred. Positions will be available for the fall 1993 semester. To apply, send curriculum vitae, three letters of reference, and recent publications to: Chairperson, Search Committee, Department of Biological Sciences, Florida International University, Miami, FL 33199. Applications must be postmarked on or before July 9, 1993. FIU is an Equal Access/Affirmative Action/Equal Opportunity Employer and a member of the State University System of Florida.

ASSISTANT PROFESSOR OF BIOCHEMISTRY. Tenure-track position in the Department of Chemistry, available January 1, 1994. Duties include teaching graduate and undergraduate courses and establishment of an externally funded research program. Research interests in plant or environmental biochemistry or bio-organic chemistry preferred. A Ph.D. with a strong background in chemistry required; postdoctoral experience desired. Submit résumé, research plans, and three letters of reference by July 15, 1993, to: Dr. Gregory Boyer, Faculty of Chemistry, State University of New York—College of Environmental Science and Forestry, Syracuse, NY 13210. SUNY-CESF is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are especially encouraged to apply.

POSITIONS OPEN

BIOCHEMIST

A tenure-track position is available at an ASSISTANT or ASSOCIATE PROFESSOR level. A Ph.D. in biochemistry and ability to develop an independent research program and teach biochemistry and other general chemistry courses are required. Salary is negotiable. Send résumé and three references to: Dr. Richard Evans, Chairperson, Chemistry Department, Alabama Agricultural and Mechanical University, Normal, AL 35762. The University is located in Huntsville, Alabama, and is an Equal Opportunity Employer.

UNIVERSITÉ DE MONTRÉAL ASSISTANT/ASSOCIATE PROFESSOR IN ORTHODONTICS

The Département de Santé buccale announces a tenure-track position in its section of orthodontics. Candidates must possess a Ph.D. or its equivalent and preference will be given to orthodontists. The successful applicant will be expected to conduct independent research and to direct graduate students within fields already developed within the faculty. These include hard tissue biology, biomechanics, biomaterials, growth and development, epidemiology, neuroscience and orofacial rehabilitation. Salary will be determined by the university scale and the successful applicant will be expected to learn French if he/she is not already French-speaking. Applicants should send curriculum vitae and have letters sent from three referees before the 15th of November, 1993, to: Dr. Jean Turgeon, directeur, Département de santé buccale, Université de Montréal, C.P. 6128, succursale A, Montréal (Québec), Canada, H3C 3J7. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

FACULTY, CLINICAL MICROBIOLOGIST

Michigan State University (MSU) invites applications for a tenure-track, academic-year, jointly appointed faculty position in the Medical Technology Program and the Department of Microbiology at the level of ASSIST-ANT PROFESSOR. The successful candidate must have a Ph.D., with nationally recognized certification and experience in clinical microbiology, and demonstrate the ability to establish an active research program. Preference given to individuals with postdoctoral experience. A strong commitment to teaching at both the undergraduate and graduate levels is expected. Review of applicants begins immediately and will continue until the position is filled. Send letter of interest, curriculum vitae and three letters of reference to: Dr. David Thorne, Chairman, Search Committee, Medical Technology Program, E-37 McDonel Hall, East Lansing, MI 48825–1108. MSU is an Equal Opportunity/Affirmative Action Educator and Employer.

RESEARCH POSITION IN NEUROLOGICAL DISORDERS OF AGING. The Ohio State University College of Medicine Neuroscience Program is seeking a Ph.D. or M.D. with specific research interests in neurological degenerative disorders of aging. Postdoctoral experience is required with preferences for those trained in either molecular genetics, neuropharmacology or biochemistry. This will be an appointment at the ASSISTANT or ASSOCIATE PROFESSOR level in the Department of Neurology with joint appointments to Pharmacology and/or Medical Biochemistry. Applicants should forward curriculum vitae, statement of research, teaching interests and experience, and the names of three references by August 1, 1993, to: Jerry R. Mendell, M.D., Department of Neurology, Ohio State University, 1654 Upham Drive, Suite 463, Columbus, OH 43210. The Ohio State University is an Affirmative Action/ Equal Opportunity Employer. Qualified women, minorities, Vietnam-era and disabled veterans and the disabled are encouraged to apply.

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR. Cognitive Neuropsychologist for Maryland Psychiatric Research Center Outpatient Program, University of Maryland School of Medicine. Ph.D. Required. Previous research experience in clinical neuroscience and schizophrenia required. This position will be responsible for clinical care, administration and neuroscience research in an outpatient research unit. Send curriculum vitae to: Robert W. Buchanan, M.D., Maryland Psychiatric Research Center, P.O. Box 21247, Baltimore, MD 21228. Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

BIOCHEMIST

A tenure-track position is available at an ASSISTANT or ASSOCIATE PROFESSOR level. A Ph.D. in biochemistry and ability to develop an independent research program and to teach biochemistry and other general chemistry courses are required. Salary is negotiable. Send résumé and three references to: Dr. Richard Evans, Chairperson, Chemistry Department, Alabama Agricultural and Mechanical University, Normal, AL 35762. The University is located in Huntsville, Alabama, and is an Equal Opportunity Employer.

ASSISTANT PROFESSOR TENURE-TRACK MOLECULAR SPECTROSCOPY OF PROTEINS

THE MASON INSTITUTE OF OPHTHALMOLOGY at the UNIVERSITY OF MISSOURI (MU), HEALTH SCIENCE CENTER is initiating a search to find a Ph.D. Biochemist or Chemist to initiate a research program using biophysical techniques to solve problems in protein chemistry as they relate to eye disease. Candidates should have experience in NMR and/or CD spectroscopy, and be willing to assume a joint appointment in a basic science department as an outlet for teaching and service activities. Send résumé and three letters of recommendation to: Dr. Beryl J. Ortwerth, Mason Institute of Ophthalmology, University of Missouri, Columbia, MO 65212. Applications from minorities and women are especially encouraged. MU is an Equal Opportunity/Affirmative Action Employer. The University complies with the guidelines of the Americans With Disabilities Act of 1990.

Boston University seeks to hire a tenured FULL PROFESSOR to serve as the DIRECTOR of a new Center for Neuroscience on its Charles River Campus. The director will take a leadership role in hiring the core faculty of the center. The director will also coordinate the development of a graduate Ph.D.-granting program in neuroscience. Candidates for director should have an exceptional international reputation as an experimental neuroscientist, preferably in behavioral neurophysiology or related areas. The director should have a broad scholarly perspective in neuroscience and demonstrated leadership skills with which to build a world-class center. The director would also coordinate the process of linking the center to the multiple neuroscience-related resources that are already part of Boston University. Candidates should send complete curriculum vitae and three letters of recommendation to: Neuroscience Search Committee, Department of Cognitive and Neural Systems, Room 240, 111 Cummington Street, Boston University, Boston, MA 02215. Boston University is an Equal Opportunity/Affirmative Action Employer.

SCIENTIFIC COORDINATOR, Part-time (25% to 50%) to assist in National Indicator Study (NIS) scientific activities. NIS is a research program (Federal and State agencies and shellfish industries) to address problems associated with current microbiological indicators used in determining suitability of shellfish waters and shellfish meats for harvesting. LUMCON is under a DOC/NOAA contract to manage NIS scientific activities. Duties include: developing a task order work plan; preparing RFP's; monitoring and evaluating scientific progress; and preparing reports and presentations. Qualifications: Ph.D. in microbiology or environmental health-related sciences; 5 years of postdoctoral experience; strong background in relevant research. Prefer candidate with training in molluscan shellfish microbiology and epidemiology; strong interpersonal and managerial skills, and publication history. Salary is negotiable up to \$66,000 per year (FTE). Employment is on a contractual basis, renewable annually up to six (6) years. Submit letter, curriculum vitae and three (3) references by July 2, 1993, to: Dr. Paul Sammarco, Executive Director, LUMCON Office of Special Programs, 150 Third Street, Room 107, Baton Rouge, LA 70801. Equal Opportunity Employer.

ALGAL CURATOR: The Provasoli-Guillard Center for Culture of Marine Phytoplankton seeks applicants with M.S. or Ph.D., experience in culturing algae, background in algal taxonomy, and experience in (electron) microscopy. Send curriculum vitae and three letters of reference by July 15, 1993, to: Dr. Robert A. Andersen, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, ME 04575. Equal Opportunity Employer.

POSITIONS OPEN

MCLEAN HOSPITAL HARVARD MEDICAL SCHOOL DIRECTOR OF THE MAILMAN RESEARCH CENTER

MCLEAN HOSPITAL and HARVARD MEDICAL SCHOOL—Professor and Director of the Mailman Research Center. The McLean Hospital and Harvard Medical School are seeking a Professor to act as Director of the Mailman Research Center. The Mailman Research Center focuses its research on mental illness and the neurosciences. Candidates should, therefore, be internationally recognized as basic science investigators with a research background in relevant areas that address neuroscience, such as neuroanatomy, neuropharmacology, molecular genetics, or molecular neurobiology as they broadly relate to Psychiatry. Additionally, candidates should be comfortable in both the scientific and clinical arenas to act as a bridge between the clinical and basic science research being performed at McLean Hospital and affiliated Harvard Medical School departments. Applicants (M.D. and/or Ph.D.) should have demonstrated research, teaching and leadership capabilities. The McLean Hospital and Harvard Medical School are committed to increasing representation of women and members of minority groups and particularly encourage applications from such candidates. Interested individuals please contact: Joseph T. Coyle, M.D., Chairman of the Consolidated Department of Psychiatry at Harvard Medical School. Action (2018) Release include a copy of an updated curriculum vitae with letter of inquiry. The McLean Hospital and the Harvard Medical School are Affirmative Action/Equal Opportunity Employers.

DIRECTOR, CENTER FOR VETERINARY MEDICINE

The Food and Drug Administration seeks an outstanding individual to provide scientific and managerial leadership for its Center for Veterinary Medicine (CVM). Qualifications include a doctoral degree in veterinary medicine or a relevant scientific discipline, as well as managerial experience at the executive level in planning and directing broad scientific research or regulatory programs.

With facilities in Rockville and Beltsville, Maryland,

With facilities in Rockville and Beltsville, Maryland, CVM is responsible for research and regulatory activities related to animal drugs, feeds, feed additives, and veterinary medical devices. The Center evaluates these substances for animal safety and effectiveness, as well as human safety as it relates to residues that may remain in

meat, milk, eggs, and poultry.

The position is in the Senior Executive Service with a salary range of \$92,900 to \$111,800. Candidates may also be eligible for a recruitment or relocation bonus of up to 25% of base pay. Further information regarding qualification requirements, application procedures, and the Center for Veterinary Medicine may be obtained by calling Jeylene Wood at (301) 443-1755. Applications will be accepted until June 30, 1993.

An Equal Opportunity Employer. FDA is Smoke-Free.

POSTDOCTORAL POSITION: Available immediately in a laboratory interested in the cloning and expression of genes involved in human intestinal T cell-epithelial cell interactions. A Ph.D. and research experience in molecular biology are required. Send curriculum vitae and three letters of recommendation to: Richard S. Blumberg, M.D., Gastroenterology Division, Brigham & Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. Brigham & Women's Hospital is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IN BIOPHYSI-CAL/BIOINORGANIC CHEMISTRY AT PENN STATE is available for study of calcium-binding protein using laser-excited lanthanide ion probe luminescence spectroscopy, fluorometry, and microcalorimetry. See, e.g., Bruno et al. Biochemistry 31, 7016 (1992). Experimental experience with proteins is essential. Send curriculum vitae and arrange to have three letters of recommendation sent to: Professor William DeW. Horrocks, Jr., Department of Chemistry, 152 Davey Laboratory, The Pennsylvania State University, University Park, PA 16802. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DEPARTMENT HEAD DEPARTMENT OF CHEMISTRY

The University of Iilinois at Chicago (UIC)

The Department of Chemistry at the University of Illinois at Chicago is seeking exceptionally well-qualified applicants for the position of Department Head. The Department has major research programs in analytical, biochemical, inorganic, organic and physical chemistry. The Department has 31 faculty and 115 graduate students. UIC, located in the heart of Chicago, is a research university with 16,000 undergraduate, 6,500 graduate, and 3,000 professional students.

The Department Head is the chief administrative

The Department Head is the chief administrative officer with responsibilities for the instructional programs of the department, administrative, budgetary and promotion decisions, and for providing leadership in the development of research, teaching and public service. A candidate should have an outstanding research program, a strong commitment to teaching, and demonstrated leadership and administrative skills, and should be eligible for appointment as a full professor. The desired appointment date is August 21, 1994.

Applications should be received by September 15, 1993, to receive full consideration, although the search will profess until the position is filled. Applications

Applications should be received by September 15, 1993, to receive full consideration, although the search will proceed until the position is filled. Applications should include full curriculum vitae and names, addresses, and telephone numbers of four references. Applications and nominations should be sent to:

Dr. Robert Gordon Search Committee for Department Head Department of Chemistry, m/c 111 The University of Illinois at Chicago 845 West Taylor Street Chicago, IL 60607–7061

UIC is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS

The Department of Pharmacology and Molecular Biology at The Chicago Medical School is initiating the third phase of faculty recruitment for tenure-track positions at all levels. Only those candidates with an ongoing funded research program and experience in the molecular aspects of cancer, cardiovascular pharmacology, toxicology or endocrinology need apply. Selected candidates are expected to contribute to teaching Medical Pharmacology and Molecular Biology courses. Attractive benefits and start-up funds available. The school is located in a modern facility adjacent to the very pleasant North Shore community of Lake Bluff, 38 miles from downtown Chicago with proximity to forest preserves and Lake Michigan. The department under new leadership has already recruited several faculty of high caliber. Excellent core facilities and strong graduate program (Ph.D. and M.D./Ph.D.) are available. Please send curriculum vitae, research plans and three names for reference to: Dr. Samson T. Jacob, Chairman, Department of Pharmacology and Molecular Biology, The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064. The Chicago Medical School is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION TRANSCRIPTION BIOCHEMISTRY WASHINGTON UNIVERSITY, ST. LOUIS

Position available to study regulation of transcript elongation by bacterial or human RNA polymerase. Approaches include structural analysis of transcription complexes, dissection of regulatory factor-control site interactions and genetic analysis of RNA polymerase subunits. Send curriculum vitae and three references to: Robert Landick, Department of Biology-1137, Washington University, One Brookings Drive, St. Louis, MO 63130. Equal Opportunity Employer.

POSTDOCTORAL POSITION to study the molecular genetics of DNA replication and the mammalian cell cycle. Epstein-Barr virus sequences and immunoglobulin, globin, myc and ribosomal RNA genes are being used as model systems both in vivo and in vitro to study cell cycle regulation of DNA replication. Other projects include the role of cell cycle checkpoints in regulating DNA replication. Apply by mail and a FAX copy to: Dr. Carl Schildkraut, CH 416, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: (718) 829-7619. Equal Opportunity Employer.

Howard Hughes Medical Institute

International Program of Research Grants

Selected Countries of Eastern Europe and the Former Soviet Union

The Howard Hughes Medical Institute announces a program of biomedical research grants for the following selected countries: Belarus, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Russia, Slovak Republic, and Ukraine. The total program budget will be about \$3 million (U.S.) annually for five years, with two types of research grants awarded: (1) grants for research at the home institutions of scientists in these countries, and (2) grants for the joint research of scientists in the selected countries and their collaborating scientific partners abroad.

Research at Home Institutions

About 40–60 grants will be awarded for research by eligible scientists at their home institutions in the selected countries of Eastern Europe and the Former Soviet Union. The five-year grants will be in the range of \$10,000–\$75,000 (U.S.) annually. The research must probe basic biological processes and disease mechanisms, in such fields as cell biology and regulation, genetics, immunology, neuroscience, and structural biology. Clinical trials or research on health education, health care delivery, or health services is not eligible for support under this initiative.

To be considered eligible for home institution awards, scientists (1) must reside in a selected country (or, if they currently live abroad, must plan to return to assume academic or research appointments at institutions in the selected countries), (2) must have made significant contributions to fundamental biomedical research, (3) must have published at least one scientific article in a peer-reviewed international English language journal or must provide a preprint in English of a publication arising from recent collaborative research with an established laboratory abroad, and (4) must not have major administrative responsibilities.

Research Collaborations Abroad

About 40–60 grants will be awarded for collaborative research conducted jointly by a collaborating scientific partner who is at an institution that is not in one of the selected countries of Eastern Europe or the Former Soviet Union and a scientist at an institution in one of the selected countries. The five-year grants will be in the range of \$10,000–\$75,000 (U.S.) annually. As noted above for the home institution awards, the research must probe basic biological processes and disease mechanisms.

For collaborative research awards, the scientist in the selected country must meet the eligibility criteria described above for the home institution awards. The collaborating scientific partner must be an established scientist at an institution not in one of the selected countries of Eastern Europe and the Former Soviet Union. The application must be submitted jointly.

Applications and Awards

Awards, which will be announced in the fall of 1994, will be based on peer review of submitted applications. The program announcement and applications will be available June 1993. The deadline for application will be in November 1993.

To request the program announcement and application, provide to the Institute your name, address, telephone number (including country code), fax number, and e-mail address.

Howard Hughes Medical Institute
Office of Grants and Special Programs ■ International Program
4000 Jones Bridge Road
Chevy Chase, MD 20815-6789
United States of America

Telephone: 1-301-215-8884 ■ Fax: 1-301-215-8888 ■ Internet: hhmigfil@class.org

The Howard Hughes Medical Institute welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

National Institutes of Health

Public Health Service
Department of Health and Human Services

Deputy Director for Extramural Research

The National Institutes of Health (NIH) invites applications for the position of Deputy Director for Extramural Research (DDER), Office of the Director. This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from the ES-1 to ES-6 level per annum (currently \$92,900 to \$115,700). A one year probationary period must be served by the individual selected if not currently in the career Senior Executive Service.

The DDER represents the Director, NIH, in the planning, execution, and direction of the NIH extramural research, training, and grants programs. The DDER (1) provides advice and guidance to the NIH Institutes and Centers in the development of policies for their extramural research programs and ensures policy implementation; (2) represents the NIH to the Office of the Secretary, DHHS, PHS, and OMB on overall extramural policy; (3) reviews and evaluates, for the Office of the Director, budget plans of NIH extramural components; (4) develops new and revised training programs to meet changing research needs; (5) serves as chair of the Extramural Programs Management Committee and other trans-NIH groups; (6) represents the Director, NIH, before the Congress, representatives of major scientific organizations and institutions, and on advisory committees for extramural research and training programs; and (7) oversees the protection of human subjects and the proper care and use of laboratory animals for the entire PHS.

The vacancy announcement with mandatory/desirable qualifications requirements can be obtained by calling (301) 402-4111. Applicants are required to submit an Application for Federal Employment (SF-171), available at all Federal Job Information Centers and Federal Personnel Offices. Resumes are not acceptable applications. Applicants may send a curriculum vitae and a bibliography. Application material must be sent to the following address:

National Institutes of Health Office of the Director Personnel Office Attn: Mr. Jack A. Vinner P.O. Box 41048 Bethesda, Maryland 20824-1048

APPLICATIONS MUST BE RECEIVED NO LATER THAN 7/28/93.

Faxed material cannot be accepted. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the PHS Commissioned Corps may submit a resume to the above address.

Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, sex, national origin, political affiliation, marital status, handicapping condition, age, or membership or nonmembership in an employee organization.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Manager, Molecular Science Research Center

Battelle, Pacific Northwest Laboratory (PNL), is looking for a manager for its Molecular Science Research Center (MSRC). The MSRC, one of eight research centers at PNL, is dedicated to advancing the molecular sciences and to applying the advancements to a broad spectrum of national missions. Basic, multidisciplinary research programs involving chemical, biological, materials, environmental, and computational sciences are undertaken by MSRC scientists to increase our fundamental understanding of complex, heterogeneous systems. The knowledge gained from MSRC research programs in advanced processing methods, soil and groundwater cleanup, analytic methods/characterization, and health effects are combined with technology development activities in other PNL research centers to solve complex national environmental problems.

The MSRC is also developing and will manage the Environmental and Molecular Sciences Laboratory (EMSL), which will be an international focal point of molecular science research with an emphasis on environmental restoration and waste management. The EMSL will be a national collaborative research center where scientists from universities, industry, and national laboratories will work cooperatively on developing new knowledge, understanding, and technology. The cornerstones of the MSRC/EMSL will be 1) basic research to gain fundamental understandings, 2) applied research to focus the fundamental knowledge on specific problems, 3) education and training of the scientific and technical community, and 4) transfer of technologies to the commercial sector. The EMSL will be a unique facility containing equipment specifically developed to address molecular-level problems in complex environmental systems.

The successful applicant must have a Ph.D. in Physics, Chemistry, or related science and an outstanding record of accomplishment in research. Further, the applicant must have significant experience in managing complex multidisciplinary research projects, senior scientific staff, and a large, laboratory-centered organization.

Duties and responsibilities will include continued development of the MSRC staff, its research programs, and its working environment. In addition, the MSRC manager will provide technical leadership for the EMSL construction project and will oversee integration of research programs within the EMSL and between the EMSL and other entities at PNL and the worldwide scientific community.

PNL, one of the nine U.S. Department of Energy multiprogram research laboratories, is operated for the U.S. Department of Energy by Battelle Memorial Institute. PNL is located in Southeastern Washington state in the city of Richland. Richland offers the advantages of small-town living and a wide variety of outdoor recreational opportunities. Battelle will be accepting applications for this position until August 1, 1993. For confidential consideration, interested individuals should send a resume or curriculum vitae to: MSRC Manager Search Committee, Human Resources Directorate, Battelle, PNL, Attn: 5106BAH, P.O. Box 999, K1-43, Richland, WA 99352. Equal Opportunity Employer. Principals Only.



MEDICAL ONCOLOGY ASSISTANT/ASSOCIATE PROFESSOR OF MEDICINE

TENURE-TRACK POSITION

Two positions are available for faculty members at the Assistant Professor level (tenure-track) or Associate Professor level (tenure) in the Division of Medical Oncology, Department of Medicine, University of Minnesota, beginning September 15, or as soon as possible thereafter. Candidates must be M.D., board-certified in Internal Medicine, board certified or board eligible in Medical Oncology, and licensed in Minnesota by start date. Requirements for Associate Professor include a professional distinction in research and writing, demonstrated effectiveness in teaching and advising, and an established published track record in peer-reviewed journals. Requirements for Assistant Professor include a demonstrated involvement in quality research accepted or published in peer-reviewed journals. Candidates should have a strong training background in basic or clinical research with evidence of the ability to develop a productive research program. Preference will be given to candidates with clinical or basic interests in lung malignancies, although individuals with a strong research background and interest in other types of solid tumors are welcome to apply. Responsibilities, in addition to research, include both inpatient and outpatient follow-up, medical outreach and teaching of medical students, residents and fellows. Interested applicants should submit a curriculum vitae and a description of research interests and plans by August 31, 1993 to:

Gordon D. Ginder, M.D.
Professor of Medicine
Director, Division of Medical Oncology
Box 286 UMHC
420 Delaware Street, SE
Minneapolis, MN 55455
(612) 624-7915

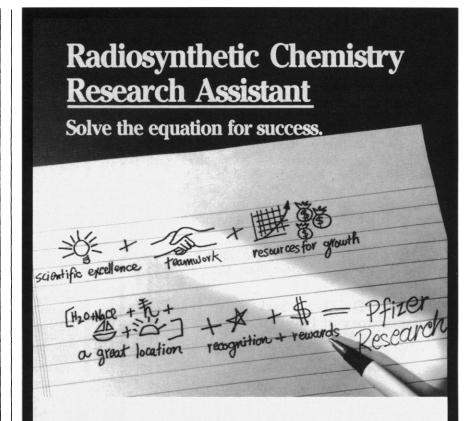
The University of Minnesota is an equal opportunity educator and employer.

THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Institute for Environmental Studies seeks applications for Director, Water Resources Center. The Director is responsible for administering an interdisciplinary water research program under PL 101-397 and serves as Research Coordinator for the NOAA Illinois-Indiana Sea Grant Program. Under PL 101-397 the Director solicits water resources research proposals, arranges reviews, and submits proposals for federal funds. The Director also assists faculty members throughout the campus in identifying and securing support for water resources research, and provides leadership for those activities at the regional and national levels. The Director holds a 12 month, 50% appointment with the Institute and a 50% tenured or tenure-track appointment in another academic unit of the university. Required qualifications are an earned doctorate in Civil Engineering, Agricultural Economics, Geology, Biology, Geography or a related science; a national reputation as a research engineer or scientist; and excellent interpersonal and organizational skills. Experience in administering research and technology transfer programs, and in instruction, is desirable.

Salary is open and depends on qualifications and experience. To ensure full consideration, applications should be received by July 15, 1993. The position can begin August 21, 1993. Send letter of application, one page resume, vita, publications list, post B.S. degree official transcripts and the names, addresses, and telephone number for at least three references to: Neil M. Hawkins, Head, Department of Civil Engineering, University of Illinois at Urbana-Champaign, Newmark Civil Engineering Laboratory, 205 North Mathews Avenue, Urbana, IL 61801. (217) 333-3814.

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



Strong growth in the area of medicinal chemistry research has created an exceptional opportunity with Pfizer Inc, a Fortune 100 multinational leader in pharmaceutical research and healthcare products.

In this position, you will be responsible for the design and synthesis of novel ¹⁴C and ³H labeled radio-pharmaceuticals. As part of the medicinal chemistry department, the successful candidate will interact closely with a multidisciplinary team of scientists in drug discovery and development.

To qualify, you should have a Bachelor's or Master's degree in Chemistry with at least 2 years in synthetic organic chemistry. Experience with modern synthetic procedures (use of air sensitive reagents, organometallics, asymmetric synthesis, etc.) and analytical techniques (HPLC, UV, NMR, MS, etc.) is essential. Additional experience with the synthesis and handling of radiolabeled chemicals is highly desirable.

We offer a stimulating professional environment in an attractive Connecticut shore area complemented by a competitive salary/benefits package. If qualified, please submit a detailed resume with salary history/requirements in confidence to: Mr. Charles P. Norris, Assistant Manager, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



Central Research

Bringing science to life.

Sandfly Research

The Laboratory of Parasitic Diseases. National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), is recruiting a post-doctoral scientist to investigate the biology of leishmania parasite development within their sandfly vectors. An M.D. or Ph.D. degree, as well as training in cell biology, electron microscopy, and medical entomology, including mass colonization of sandflies, are essential.

Send curriculum vitae and the names of three references no later than June 30. 1993 to:

Dr. David Sacks Laboratory of Parasitic Diseases NIAID, NIH BLDG. 4, Rm. 126 9000 Rockville Pike Bethesda, MD 20892

Salary: \$38,000 - \$48,000

NIH is an Equal Opportunity Employer

Senior Inflammation Biologist

The PARKE-DAVIS Pharmaceutical Research Division of the Warner- Lambert Company seeks PhD with postdoctoral experience to help develop new in vivo and in vitro models of inflammation, and participate in inflammation research related to our ongoing drug discovery program in cellular adhesion.

Primary activities will include an assessment of basic in vivo and cellular participation of adhesion ligands in inflammation and arthritis. Applicants must have a background in pharmacology or immunopathology with an emphasis in model development. Individuals with a background in in vivo models of inflammation or arthritis (particularly models with a strong vascular component), pharmacology, endothelial cell biology and biochemistry (including diapedesis), histopathology, immunohistochemistry and/or in situ hybridization are preferred. Knowledge of basic molecular techniques will also be useful. Candidates will be required to work collaboratively in a dynamic multidisciplinary environment, and have very strong written, oral and interpersonal communication skills.

Interested individuals should forward their resume and list of references to Box JDM-93059, PARKE-DAVIS Pharmaceutical Research Division, Human Resources, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment'



أأناه أراز والمعارة والمعادية والهرام يمومها ووويهم

"Equal Opportunity in Action'

POSTDOCTORAL RESEARCH OPPORTUNITIES

 $\label{thm:continuous} \textbf{The Lankenau Medical Research Center} \ \ \text{has created three new positions, under the direction of three distinguished investigators, in its Postdoctoral Center (and the continuous continuous$ Fellowship Program available July 1, 1993 in the following areas:

Tumor Promotion in Carcinogenesis

Susan Gilmour, Ph.D.
Investigate the role of polyamines in epithelial carcinogenesis as well as protein-DNA interactions controlling ornithine decarboxylase expression during epidermal neoplastic progression. Experience in molecular/cellular biology is preferred.

Epidermal Stem Cells, Hyperplasia, and Chemical Carcinogenesis

Rebecca Morris, Ph.D.

Investigate the stem cell model of cellular replacement in the epidermis by utilizing fluorescent activated cell sorting of the epidermal cells from normal, hyperplastic and neoplastic murine epidermis. Experience in epithelial cell biology or flow cytometry is essential.

Developmental Genetics Janet Sawicki, Ph.D.

Investigate the cell lineage of skeletal muscle during mouse embryogenesis. A strong background in molecular/cellular biology is required. Experience in DNA microinjection and/or ES cell injection is desirable.

The Lankenau Medical Research Center, composed of interactive research groups in the areas of molecular, cellular and developmental biology, is housed in a new building designed to conduct state-of-the-art biomedical research. We are located in suburban Philadelphia on the campus of The Lankenau Hospital, a member of the Main Line Health System. Applicants should submit their curriculum vitae, 3 letters of recommendation and a brief sketch of research interests and experience to: Dr. Charles L. Skutches, Ph.D, Director of Scientific Administration, The Lankenau Medical Research Center, 100 Lancaster Ave., west of City Line, Wynnewood, PA 19096, (215) 645-3475. EOE.



LABORATORY DIRECTOR

A position is open for a Director of Parentage Testing. This highly visible position entails scientific direction and management of a national testing laboratory, direction of related research and product development. An M.D. or Ph.D. with expertise in DNA-based testing is required. Experience in paternity testing, genetics, statistics, and laboratory management preferred. Excellent communication skills essential.

The Blood Center of Southeastern Wisconsin, Inc., is a non-profit service organization which offers specialized laboratory services on a regional and national level and is recognized internationally as a leader in blood-related research. The Blood Center provides all of the blood and blood components used by patients in 29 southeastern Wisconsin hospitals.

The Blood Center of Southeastern Wisconsin offers an excellent wage and benefit package. Send curriculum vitae and names and addresses of three references



of Southeastern Wisconsin Attn: Debra Endean, Ph.D. 1701 W. Wisconsin Avenue Milwaukee, WI 53233 Equal Opportunity Employer Smoke-free Workplace M/F/H/V

Department of Health and Human Service

Public Health Service

National Institutes of Health

National Center for Human Genome Research

CHIEF, DIAGNOSTIC DEVELOPMENT BRANCH (DDB)

The National Institutes of Health (NIH) invites nominations and applications for the position of Chief for its Diagnostic Development Branch (DDB), Division of Intramural Research (DIR), National Center for Human Genome Research (NCHGR). This is a Civil Service position in the Senior Executive Service (SES), with Base Salary Ranging from \$92,900 to \$115,700 per year depending on qualifications. The person selected may also be eligible for Physician's Comparability Allowance of up to \$20,000 per year. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25 percent may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one year probationary period must be served if the individual selected is not currently in the SES. Members of the Commissioned Corps of the U.S. Public Health Service and SES reinstatement eligibles will be considered.

The Chief, DDB, serves under the general direction of the Scientific Director, NCHGR, and is responsible for planning, organizing, and directing a state-of-the-art biomedical research program that conducts and supports a program of applied clinical research to develop diagnostic procedures to apply to genetic disease. He/she will be responsible for formulating the overall research goals of the Branch, designing and supervising all ongoing research projects and managing allocated resources. The Branch has an operating budget of \$4 million and a staff of 16.

For more information, contact Janis Thurman at (301) 402-4833. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. **These documents must be received by close of business June 30, 1993.** Please submit to:

Janis Thurman
National Institutes of Health
National Center for Human Genome Research
9000 Rockville Pike
Building 31, Room 3B31
Bethesda, Maryland 20892



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, AGE OR MEMBERSHIP OR NON-MEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

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Postdoctoral Research at The Wistar Institute



The Wistar Institute is seeking Postdoctoral applicants interested in Molecular Genetics, Molecular Virology, Cell & Developmental Biology, Experimental Thera-

peutics, Cell & Molecular Immunology, and Structural Biology. Fellows can anticipate a stimulating and challenging experience in an environment characterized by strong, interdisciplinary collaboration and state-of-the-art biotechnology.

Wistar is an independent, non-profit biomedical research institution with close collaborative relationships with the University of Pennsylvania and other major research and clinical organizations within the Philadelphia region. The Wistar Institute is an NIH-designated Basic Cancer Research Center.

For more information, contact: Coordinator of Research Training, THE WISTAR INSTITUTE, 36th & Spruce Streets, Philadelphia, PA 19104. Interested Postdoctoral applicants are requested to send a Curriculum Vitae and the names of three (3) references. An Equal Opportunity Employer.

QUALITY ASSURANCE

QA BIOTECHNOLOGY MANAGER

Miles Inc., is seeking a scientist with experience in both process and analytical development of recombinant products to join the Quality Assurance organization as the QA Biotechnology Manager.

Responsibilities include:

- Establish and manage a group of skilled scientists trained in a wide array of state-of-the-art biochemical methods to probe the biochemical and biophysical properties of recombinant proteins.
- Provide technical guidance for a variety of bioanalytical methods; technical expertise in fluorescence, circular dichroism, and/or mass spectroscopy are highly desirable.
- In a team environment, establish strategic approaches to evaluate process consistency within research, development and manufacturing.

Miles Inc., in Berkeley maintains a leading worldwide position in the field of Human Biologicals. In your search of an exciting career opportunity, consider joining our well funded state-of-the-art biotechnology site.

A Ph.D. in Biochemistry/Biotechnology or related field plus 5 to 10 years of relevant work experience or equivalent is required. The position requires strong communication, leadership and team building skills. In addition, the candidate must have the ability to rapidly solve problems.

Excellent salary and benefits package. Interested candidates are invited to submit resumes to:

JoAnn McHugh, Miles Inc., P.O. Box 1986, Berkeley, CA 94701 MILES /

Pharmaceutical Division
An equal Opportunity Employer

Postdoctoral Scientists

The R.W. Johnson Pharmaceutical Research Institute (RWJPRI) is a first-class worldwide research and development organization within Johnson & Johnson, the world's largest and most comprehensive provider of health care products. The mission of RWJPRI is to discover and develop biotechnology-derived and traditional drugs which will drive the growth of the Johnson & Johnson companies...Cilag, Ortho-McNeil Pharmaceutical, and Ortho Biotech.

We have 2 immediate opportunities for postdoctoral fellows to join us at our campus-like setting located in central New Jersey midway between New York City and Philadelphia.

Molecular and Cellular Biology

Requires a PhD in Molecular Biology, Biochemistry, Microbiology, Biology or related field and knowledge of molecular biology mutagenesis techniques, expression of recombinant proteins in prokaryotes and/or eukaryotes. The successful candidate will conduct research on structure-function relationships of hematopoietic growth factors and their receptors; and carry out mutagenesis experiments and biological characterization of mutant proteins. (HR Dept 6A)

Signal Transduction

Requires a PhD in Biochemistry, Molecular Biology or related field and knowledge of the delineation of signal transduction pathways involved in growth factor stimulated cell proliferation. Familiarity with hematopoietic cell systems is desired. The successful candidate will conduct research involving basic cellular and molecular biological techniques including tissue culture, cDNA library preparation and screening, eukaryotic cell transfections, western blot analysis and protein phosphorylation/kinase assays. (HR Dept 6B)

The positions provide liberal research support, excellent library facilities, and a good benefits package. Ours is a smoke-free workplace.

No phone calls please. Submit your curriculum vitae with the names of 3 references to: Ms. Gerry Scott-Higgins, indicate HR Dept # for the position of your choice, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602.

An Equal Opportunity Employer, M/F.



PHARMACEUTICAL RESEARCH INSTITUTE

a Johnson Johnson company

Position Available Postdoctoral Fellow or Staff Fellow in Molecular Genetics

To work with Dr. Vilhelm Bohr on the Molecular Aspects of DNA Repair and Its Role in Aging

Positions are available in the Laboratory of Molecular Genetics, National Institute on Aging, National Institutes of Health. We are located at the Gerontology Research Center in Baltimore, MD at the Francis Scott Key Medical Center of the Johns Hopkins University. We are seeking researchers at different levels to enter our programs on DNA repair. The regulation, heterogeneity, and fine structure of DNA repair is studied in mammalian cells. We are also interested in the role of DNA repair in Aging. Applications to:

Dr. Vilhelm Bohr Chief, Laboratory of Molecular Genetic National Institute on Aging, NIH 4940 Eastern Avenue Baltimore, MD 21224

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genzyme

The strength of an organization can be measured by the scope of its products. At Genzyme, we are developing a range of innovative health care products and services that are enabling us to achieve success on a global scale.

Head of Molecular Biology

This is an exceptional opportunity for an outstanding molecular biologist to assume the leadership of our Molecular Biology group located in Framingham, Mass. The group is responsible for molecular biology associated with

located in Framingham, Mass. The group is responsible for molecular biology associated with the development of recombinant proteins. The group is currently engaged in the development of vectors suitable for gene therapy, especially for Cystic Fibrosis, with particular emphasis on adenovirus vectors.



Candidates must have at least 6-10 years of post-doctoral experience in molecular virology, gene expression, gene therapy or transcriptional control and a strong publication record in first-rate journals.

The ability to manage and motivate a sizable group of research scientists and excellent communication skills are essential. Experience in a commercial setting would be advantageous although candidates with a strong track record in academia will be considered.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks' paid vacation, a 401(k) plan with a company match, exten-

sive insurance benefits and an Employee Stock Purchase Plan. Please forward your resume to: Steve Grossman, Human Resources Department, Dept. S611, Genzyme Corporation, One Mountain Road, Framingham, MA 01701. An equal opportunity employer.

ADVANCING HEALTH CARE PRODUCTS AND SERVICES WORLDWIDE

Department of Health and Human Service • Public Health Service

National Institutes of Health • National Center for Human Genome Research

CHIEF, LABORATORY OF GENETIC DISEASE RESEARCH (LGDR)

The National Institutes of Health (NIH) invites nominations and applications for the position of Chief for its Laboratory of Genetic Disease Research (LGDR), Division of Intramural Research (DIR), National Center for Human Genome Research (NCHGR). This is a Civil Service position in the Senior Executive Service (SES), with base salary ranging from \$92,900 to \$115,700 per year depending on qualifications. The person selected may also be eligible for Physician's Comparability Allowance of up to \$20,000 per year. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25 percent may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one year probationary period must be served if the individual selected is not currently in the SES. Members of the Commissioned Corps of the U.S. Public Health Service and SES reinstatement eligibles will be considered.

The Chief, LGDR, serves under the general direction of the Director, NCHGR, and has the responsibility for a major program of genetic research to identify, analyze, and determine the functions of cloned genes involved in human genetic diseases. He/she will be responsible for formulating the overall research goals of the Laboratory, designing and supervising all ongoing research projects and managing allocated resources. The Laboratory has an operating budget of \$8 million and a staff of 37.

For more information, contact Janis Thurman at (301) 402-4833. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. **These documents must be received by close of business June 30, 1993.** Please submit to:

Janis Thurman National Institutes of Health National Center for Human Genome Research 9000 Rockville Pike Building 31, Room 3B31 Bethesda, Maryland 20892



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, AGE OR MEMBERSHIP OR NON-MEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

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SCIENTISTS for Fetal Cell Isolation Project

MediGene, Inc., a rapidly growing genetic services company, is seeking to significantly expand its core team of scientists involved in fetal cell isolation. Successful candidates will join a multidisciplinary team of scientists dedicated to discovery of novel approaches to this project. We are seeking energetic investigators in the fields of cellseparation methodologies and flow cytometry. Oualifications:

Immunologist/Cell Biologist: Ph.D.-level scientist to develop cell isolation procedures. Strong background in cell immunology or hematology, extensive knowledge of cell surface markers and adhesive molecules. Blood cell fractionation and rare cell isolation experience a plus.

Postdoctoral Scientist: To join our flow cytometry group. Strong background in immunology/cell biology and familiarity with flow analysis and sorting.

MediGene is located in southern Westchester County with close proximity to New York City while enjoying country-like setting of suburbia. We offer excellent salary and benefits package as well as the opportunity to advance with a rapidly expanding organization. For confidential consideration, please submit your curriculum vitae and three references to:

MediGene, Inc. Personnel Director 1 Executive Boulevard Yonkers, NY 10701

An Equal Opportunity Employer

BS/MS Research Assistants

Pfizer, a U.S. based multinational pharmaceutical company, has several immediate openings in its expanding Central Research Division Laboratories located in Groton, Connecticut.

If you have a BS or MS in Biology, 2 years relevant laboratory experience and strong theoretical knowledge, consider the following openings as a Research Assistant.

Molecular Biology/Immunology

Perform the analysis and development of immune stimulatory compounds. Conduct molecular biology experiments, including RT/PCR analysis of mRNA expression, cloning of transcription factors, transfection and tissue culture. Degree in Molecular Biology and/or Biochemistry desired.

Pulmonary

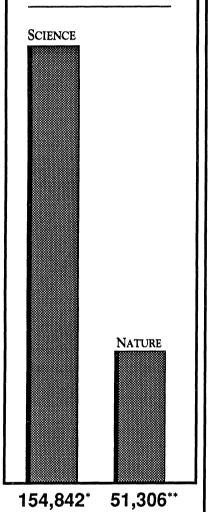
Develop radioenzymatic and cell-based assays for testing antiinflammatory drugs. Degree in Biology/Biochemistry and *in vivo* experience preferred.

In addition to a stimulating research environment, we offer a competitive compensation and benefits package, including generous relocation assistance to this southeastern Connecticut shoreline community. Qualified applicants may send a resume and cover letter, indicating position of interest, a description of your experience, and names of three references, to: Ms. E. Buller, Supervisor, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



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RECRUITMENT ADVERTISING

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Europe: Annemarie Vis +44 223 302 067

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study the molecular genetics of ovarian tumors. Research will involve loss of heterozygosity studies and development of new techniques to study genetic alterations during tumor development. Experience in molecular biology is desired. Submit curriculum vitae and three references to: Dr. Maura Pieretti, Department of Pathology, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40503. The University of Kentucky is an Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITIONS (two) are available July 1, 1993, to study: (I) Cell and molecular biology of the human asialoglycoprotein receptor. (II) Regulation and modulation of the kidney H+ATPase and its vesicular trafficking pathway. (III) Cytokine gene dysregulation in autoimmunity. Send curriculum vitae, reprint of key publication, and the names of three references to: Michael A. Shia, Ph.D., Department of Medicine (Renal Section), Evans 428, Boston University School of Medicine, 88 East Newton Street, Boston, MA 02118.

POSTDOCTORAL POSITIONS Plant Molecular Virology and Biology

Two positions are available. The first position is currently open and will involve molecular studies on attenuated strains of TMV to characterize the cause(s) of their mild phenotypes. The second position (open in July 1993) will involve analysis of long distance transport of various strains of TMV by various techniques. Applicants with backgrounds in biochemistry, molecular virology, or plant physiology are preferred. Positions are for two years based upon performance and can be extended to three years. Those interested should send by regular mail or FAX a cover letter with curriculum vitae and names of three references to: Dr. Richard Nelson, Noble Foundation, P.O. Box 2180, Ardmore, OK 73402; FAX: (405) 221-7380 and Mr. Robert Geurin, Personnel Director, same address as above; FAX: (405) 221-7362.

POSTDOCTORAL

Position available immediately to study genetic problems in humans by establishing and applying innovative approaches in Dr. Honghua Li's Laboratory. Candidate should have a background in either mammalian cytogenetics, cell biology, or embryology. Experience in microinjection, nuclear transplantation, micromanipulation, and/or cell fusion would be especially valuable. Send curriculum vitae, statement of research interests, and three references to: Charlotte Tule, Personnel Office, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS Integrative Photosynthesis Research University of Illinois at Urbana-Champaign (UIUC)

A Department of Energy-funded Training Program offers postdoctoral opportunities for research into mechanism and integration of all aspects of photosynthesis. Projects cross traditional boundaries of photosynthesis research and encourage training and experience in multiple techniques of biochemistry, biophysics, molecular genetics and physiology. Special emphasis is placed on creativity and the ability to envision new methodological approaches. Salary starts at \$24,000 per year, with full benefits. Only U.S. citizens and permanent residents are eligible. Send curriculum vitae, a short statement of research interests, and names of three references to: Professor C.A. Wraight, 190 Plant and Animal Biotechnology Laboratory, University of Illinois, 1201 West Gregory Drive, Urbana, IL 61801. FAX: 217-244-1336. UIUC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available for research in combined molecular biology–electrophysiology project on ion channels. Training in molecular biology required. Additional familiarity with or training in electrophysiology helpful. Submit curriculum vitae to: Dr. Ira S. Cohen, Department of Physiology & Biophysics, Health Sciences Center, State University of New York, Stony Brook, NY 11794–8661. SUNY at Stony Brook is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN MOLECULAR NEUROBIOLOGY

Available at the University of Pennsylvania School of Medicine to study the pharmacological and physiological properties of cloned NMDA or GABA_A receptors. Direct experience in molecular biology is strongly preferred but candidates who have been very productive in other areas will be considered. Please send curriculum vitae and names of three references to: Dr. Dolan B. Pritchett, Department of Pharmacology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104.

POSTDOCTORAL FELLOWSHIPS available in October 1993 and January 1994 to study mechanisms of signal transduction across cell membranes. The work will focus on the structure, function and cellular regulation of G proteins. Experience in protein chemistry and/or molecular biology is essential. Send curriculum vitae and names of three references to: Dr. Eva J. Neer, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP IN VASCU-LAR BIOLOGY—Position available now to study the biochemistry of platelet ligand-receptor interactions, the biochemistry of glycosaminoglycans, and heparin-protein interactions. Join a major investigative program directed by senior faculty in schools of medicine and basic sciences. Attractive compensation package. Send curriculum vitae to: Dr. Michael Sobel, P.O. Box 108, Medical College of Virginia, Richmond, VA 23298.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION is available in a leading laboratory that studies the pathophysiology of Alzheimer's disease. Only candidates with excellent background in protein purification will be considered. Experience in molecular biology, cell culture and cell biology is preferred. Please send curriculum vitae and names of three references to: Dr. Carmela R. Abraham, Boston University School of Medicine, K-5, 80 East Concord Street, Boston, MA 02118. Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE IN REPRODUCTIVE ENDOCRINOLOGY

Position available July 1, 1993, for individual with postdoctoral experience in cell and/or molecular biology. Research involves gonadotropin subunit transcription and secretion rates with respect to glucocorticoids and ovarian peptides. Send letter summarizing background and interests, curriculum vitae and names of three references to: Dr. Neena Schwartz, Department of Neurobiology and Physiology, Northwestern University, 2153 Sheridan Road, Evanston, IL 60208–3520. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

The Agricultural Research Service is accepting applications for a permanent, full-time RESEARCH PHYS-IOLOGIST or RESEARCH POULTRY SCIENTIST. The objective of this position will be to develop a program of research in the area of avian semen preservation (short-term liquid semen preservation and cryopreservation) with emphasis on turkey semen. Candidates must have a working knowledge of cell biology and reproductive physiology and cryobiology. A Ph.D. in the physiological, biological or poultry and animal sciences with emphasis on reproduction is desired. Experience with animals and reproduction is essential. Applicants must be U.S. citizen. Salary range is \$33,623 to \$52,385. Submit SF-171, curriculum vitae, transcripts, statement of research goals and names and addresses of references to: J. Harrington, 6305 Ivy Lane, Personnel Division, USDA, ARS, Greenbelt, MD 20770. Specific questions regarding the position may be directed to: Dr. L. A. Johnson, 301/504-8545. USDA, ARS is an Equal Opportunity/Affirmative Action Employer. Applications for this announcement should be postmarked by July 12, 1993 and marked No. 3E006.

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

BIOTECHNOLOGY TRANSFER

c £60K Package

Effective technological interaction between basic scientific research and industry is now widely recognised as essential for the international competitiveness of advanced economies. This provides a great opportunity for organisations and individuals who can pioneer real improvements in this area.

The John Innes Centre leads Europe in plant biotechnology research. The Centre has decided to take an innovative approach to technological interaction with industry, with the following aims:

- Expanding mutual awareness and two-way information flow between researchers and industry.
- Enhancing performance in the identification, protection and licensing of intellectual property.
- Providing facilities for the reduction-to-practice of discoveries and for development work commissioned by industry.

The Centre wishes to recruit an outstanding individual as Commercial Manager, to head this activity. He or she will have the ability to develop novel ways to achieve the above aims and, within two years to attract additional funds from outside sources to develop the unit.

The ideal candidate will have a PhD in a life science, experience in plant biotechnology or agro-industry and a record of commercial success in licensing and business development.

Applications by CV to Debbie Youds, Personnel Officer, John Innes Centre, Colney Lane, Norwich NR4 7UH. Selected candidates will receive further details and be invited to visit the John Innes Centre.





Programmed Cell Death Umeå Center of Molecular Pathogenesis (UCMP) Umeå University, Sweden A call for scientists interested in programmed cell death

A new interdisciplinary research center (UCMP) devoted to **programmed cell death** will be formed. Internationally competitive scientists will be recruited with an interest in functional, molecular and structural aspects of this process.

UCMP will start from the 1st of July 1993, financed by the Swedish Government, the Umea University and the local City and County Councils.

Umeà University is situated in an attractive area in Northern Sweden with a rich supply of cultural and sport activities. The center will be located in a new building (ready in of spring 1994) also including the Depts. of Microbiology and Cell and Molecular Biology, both leading research establishments in Scandinavia. The scientific environment also includes many internationally competitive groups in the fields of cell biology, immunology and chemistry.

The faculty will consist of one coordinator holding a permanent position and 4-5 independent group leaders with tenure track positions. To integrate functional and structural studies, one of the groups will be oriented towards X-ray crystallography., The coordinator will be supported by a local Administrative Board and by an international Scientific Advisory Board chaired by Prof. Lennart Philipson, New York.

Positions offered:

Coordinator/professor

Group leaders/, assoc./assist. professors

The coordinator will receive post-doc fellowships and financial support covering the running costs for three years. The group leaders will be guaranteed financial support for post-doc fellows and seed money covering the running costs for the first two years. Candidates are invited to send their CV, bibliography, a research proposal and the names of three academic references to Prof. Thomas Edlund, Dept. of Microbiol., Umeå Univ., S-901 87 UMEÅ, before August 1st. For further information, please contact Prof. Thomas Edlund by fax + 46-90-13 99 29.



International Career Opportunities





GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is directed towards the discovery and investigation of novel molecular mechanisms that could be used as drug targets to treat serious diseases. In particular, research is focused on the CNS. allergies and inflammatory conditions. We have an outstanding opportunity for a

PROTEIN MODELLER

The successful candidate will have a key position, developing and applying the latest modelling techniques for predicting protein structures from primary sequence data. The ideal candidate will have extensive experience in building homology models of proteins and their interactions with other proteins, DNA and ligands. The work will involve close collaboration with molecular biologists and protein chemists to design experiments to test hypotheses generated by modelling, so we are looking for someone who enjoys working in a multidisciplinary international team, as well as having the ability to develop their own research interests. Informal enquiries can be made to Dr. Tim Wells or Dr. Jonathan Knowles (tel. ++41 22 706 96 66).

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live. The Institute for Molecular Biology is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to : Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology S.A., 14, chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.



THE UNIVERSITY ! OF ADELAIDE

THE UNIVERSITY OF ADELAIDE SOUTH AUSTRALIA invites applications from both women and men for a Tenurable Lecturer Level B available from 1 January 1994 in the **DEPARTMENT OF**

The appointee is required to participate in undergraduate teaching in plant science, especially taxonomy, evolution and biodiversity (all levels) and in general introductory (first-year) biology, to supervise Honours and postgraduate students and to develop research programs.

The successful applicant will have expertise in the taxonomy and evolution of flowering plants and should be willing to participate in field-oriented programs in teaching and research.

Current initiatives within the Department include studies of evolution of tropical/sub-tropical angiosperm families based on plant macrofossils and leaf-based taxonomic studies.

Preference may be given to an applicant who will cooperate with existing staff in the initiation of teaching and research programs in the taxonomy and biodiversity of tropical, sub-tropical, or warm-arid zone vegetation.

Further information concerning the duties of the position and selection criteria should be obtained from Professor FA Smith, Head of the Department of Botany, telephone (61 8) 303 5280 or facsimile

Annual Salary: AUS\$41,000 x 5 - \$48,688.

It is University policy to encourage women to apply for appointment to tenurable academic appointments. Holders of full-time tenured or tenurable academic appointments have the opportunity to take leave without pay on a half-time basis for a specific period of up to ten years where this is necessary for the care of children.

APPLICATIONS IN DUPLICATE, quoting reference number 2846, giving personal particulars (including whether candidates hold Australian permanent residency status), details of academic qualifications and names and addresses of three referees should reach the Director, Personnel Services, University of Adelaide, South Australia, 5005, Telex UNIVAD AA 89141, Facsimile (61 8) 303 4353 not later than 12 July 1993.

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THE KAROLINSKA INSTITUTE POSTDOCTORAL POSITIONS

As a new initiative to develop and strengthen international scientific interactions, the International Committee at the Karolinska Institute has decided to open up three fellowships, each for one year with the possibility for a further year's prolongation. This will be repeated for two years after which an evaluation of the performance of the program will take place. The stipends will during the first year by opened up in biochemistry, developmental biology and neurobiology.

The Karolinska Institute is the Medical School in Stockholm with a strong emphasis on

research with a broad profile. The three above mentioned areas have been selected for the first fellowships, because these are forceful disciplines at the Institute and because there

trist reliowships, occause these are ordered disciplines at the institute and because there is a wish to promote these areas further.

Biochemistry at the Karolinska Institute represents a traditionally very strong discipline which continues to be one of the scientific strongholds of the Institute. Current interests include evolution of proteins, enzymes involved in nucleic acid metabolism, cellular transport of proteins, leukotrienes and other physiologically active fatty acid derivatives.

transport of proteins, leukotrienes and other physiologically active fatty acid derivatives, hormonal control of geneexpression, basic and clinical aspects of drug metabolism and mechanisms of cell toxicity.

Developmental Biology is a young science at the Karolinska Institute, and several new groups have recently been set up. The projects concern topics such as identification of genes controlling mammalian development, the roles of nuclear hormone receptors, surface proteins and growth factors in developmental processes, and differentiation of stem cells. Organ differentiation is studied in collaboration with the Departments of Pediatrics. Facilities for establishment of transgenic mice and homologous recombination are avail-

Today's **Neurosciences** in the Karolinska Institute include analysis of messenger molecules including growth factors, neuroplasicity, transplantation, neuropharmacology, electrophysiology with network analysis, pain research, advanced imaging techniques (PET, NMR), psychiatric research, neurovirology, neuroimmunology and degenerative

seases including Alzheimers' research.

If you are interested in those positions, please send your curriculum vitae with a list of publications and the names of three referees to:

Internationella Nämnden, Karolinska Institutet
Box 60 400, S-104 01 Stockholm, Sweden before August 1.
The top candidates will be asked to visit the Karolinska Institute for interviews and seminars.

Further information can be obtained from:

Professor **Jan-Åke Gustafsson,** (for Biochemistry) telephone: 46-8-779 71 01, 774 92 07 fax: 46-8-711 66 59

Professor **Björn Wennström** (for Development Biology) telephone: 46-8-728 73 50 fax: 46-8-34 54 29

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THE UNIVERSITY OF GRONINGEN THE NETHERLANDS

has an opening for a Professor in Inorganic Solid State Chemistry

(vacancy number 930604)

in the Laboratory of Chemical Physics, Department of Chemistry.

We are looking for an enthusiastic, imaginative chemist capable of conceiving and synthesizing new, unconventional inorganic solid state compounds with interesting physical properties. A strong interest in the fundamental relations between these properties and the composition and structure of the compounds to be prepared should be a primary motivation. Affinity towards potential applications is desirable.

The research in the laboratory forms part of the research program of the Materials Science Centre, a Research School in which important parts of the research of the Departments of Physics and Chemistry are brought together. In this centre modern facilities and broad expertise are available for the physical characterization of solids, in bulk as well as in thin layers. These facilities encompass the instruments for structure determination by X-ray diffraction, and for the measurements of optical, electrical, magnetic and thermal properties in the Inorganic Solid State group that will be led by the appointee. In addition to this research group the laboratory consists of three more groups: Inorganic Thin Layers (epitaxy, in situ characterisation techniques), Theoretical Chemistry (theory and computation of electronic structures) and Spectroscopy (ultra-fast laser spectroscopy, non-linear optics).

The staff of the laboratory contributes to the courses in physical and inorganic chemistry for all science students and is responsible for the advanced courses and research projects for students specializing in physical and inorganic solid state chemistry.

Experience in carrying out independent research of high quality, the ability to direct a research group and good teaching qualities are required.

The successful applicant is expected to acquire an adequate knowledge of the Dutch language within a reasonable period.

The appointment carries tenure. The gross salary will be between Dfl. 7.713, to Dfl. 13.722, per month depending on qualifications.

Further information can be obtained from Prof. W.C. Nieuwpoort, appointment committee chairman, either by phone (+)31 50 634372 or 634440, or by Internet e-mail to NIEUWPOORT@CHEM.RUG.NL.

Letters of applications, including a curriculum vitae, a list of publications, an outline of research interests and names and addresses of three referees, should be sent within four weeks after publication of this advertisement to the Head of Personnel Department, University of Groningen, P.O. Box 72, 9700 AB Groningen, the Netherlands.



INTERNATIONAL CAREER OPPORTUNITIES



UNIVERSITY OF OXFORD

Department of Pharmacology

In association with

THE NATIONAL INSTITUTE FOR MEDICAL RESEARCH, MILL HILL

Postdoctoral Research Assistant required to study the molecular biology of calcium release channels Salary on the RS1A Scale (£12,638 to £20,140 per annum)

A 3 year postdoctoral position is available from 1st October 1993 funded by the AFRC's Intracellular Signalling Programme. The research is aimed at characterizing the intracellular receptor for cyclic ADP-ribose, a novel calcium mobilizing second messenger.

The project will employ a multidisciplinary approach including molecular biology and protein biochemistry, and involve work at both Oxford and Mill Hill. Candidates with relevant experience are invited to send two copies of a full curriculum vitae together with the names, addresses and telephone numbers of three referees to: The Administrator, University Department of Pharmacology, Mansfield Road, Oxford OX1 3XT, U.K.

Informal enquiries may be directed to Dr. Tony Lai (081 959 3666 ext. 2154) at the National Institute for Medical Research, Mill Hill.

Closing Date: 1st July 1993

The University is an Equal Opportunity Employer

VASCULAR BIOLOGY LABORATORY SCIENTIST

The A.C. Burton Vascular Biology Laboratory, within the Victoria Hospital Research Institute (VHRI), invites applications for the position of Scientist. This individual will join a multidisciplinary group of physicians and Ph.D. scientists whose interests encompass the fields of pulmonary and systemic vascular reactivity, circulatory dysfunction in sepsis, medical biophysical techniques for measurement of microvascular responses, red cell function, and microcirculatory oxygen transport.

The applicant must have a Ph.D. and a background in the field of endothelial cell biology. Individuals with an interest in the impact of inflammation on receptor expression in neutrophils and endothelial cells will be preferred. Knowledge and experience in molecular biology techniques and other techniques such as cell culture and experience with intravital microscopy is desirable.

Cross-appointment will be available in an appropriate clinical department and in a basic science department of the University of Western Ontario. The position is regular full-time and salary will be commensurate with academic rank. The VHRI will provide investigator salary and generous support for supplies, equipment and personnel. The successful applicant will be required to seek external funding for operating grants.

Victoria Hospital is located in London, Ontario which is quickly becoming a renowned centre for medical expertise and which offers the advantages of big city living with a small town atmosphere including affordable housing.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applicants should send their resume, names of three referees, and an outline of future research direction by July 15, 1993 to Dr. Joseph J. Gilbert, Vice President Research, Victoria Hospital Research Institute, 375 South Street, London, Ontario, Canada N6A 4G5.

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INTERNATIONAL MEETING





HGM 93



Human Genome Mapping Workshop 93

Nov. 14 (Sun.) - 17 (Wed.), 1993, Kobe, Japan

HGM 93: First in a series of biennial meetings to facilitate interaction among human geneticists,

molecular biologists, and representatives of the large-scale genome mappers.

HGM 93: Fundamental to the massive international effort to map and ultimately sequence the human

genome.

HGM 93: The program is being launched by the organizing committee to assist the community

working on the Human Genome Project and related areas.

Program

1. Poster Session

2. Chromosome Specific Sessions

· Chromosome 1-22, X, Y

· Mitochondrial DNA

· Clinical Disorder

Neoplasia

3. Workshops on Selected Topics of Genome Research (): chair

· cDNA

(Ann-Marie Poustka, Shoji Tsuji) (Misao Ohki)

· New Techonology

(Leroy Hood, Yoshiyuki Sasaki)

· DNA Sequencing · DNA Polymorphism and Genetic Maps

(Jean Weissenbach, Yusuke Nakamura)

· Cytogenetic Maps

(David Ward, Tada-aki Hori)

· Unusual Mammalian Genetic Mechanisms

(Hunt Willard, Norio Niikawa) (Steve O'Brien, Hiroshi Yoshikawa)

· Comparative Maps and Model Organisms · Polygenic Diseases

(Eric Lander)

· Gene Therapy

(Stefan Karlsson, Takashi Shimada)

· Ethics

(Victor McKusick, Hiraku Takebe)

· Informatics

(Mark Lathrop, Minoru Kanehisa)

4. Symposium on "Genome Analysis and Medicine"

Chair:

Yusuke Nakamura

Co-chair:

Mark Lathrop

Speakers:

Francis Collins, William Cookson, Robert Komeluk, Janet D. Rowley

Grant R. Sutherland, Gilles Thomas

Call for Papers: Deadline for Submission of Abstracts: June 30, 1993

(7 days extension for SCIENCE readers!!!)

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POSITIONS OPEN

POSTDOCTORAL OR RESEARCH SCIENTIST POSITION

Center for Molecular Medicine University of Texas Health Science Center

A postdoctoral or research scientist position is available immediately for an outstanding individual interested in working in a stimulating re-search environment located in the newly constructed, state-of-the-art, Institute of Biotechnology (see *Nature*, 357, 631). Areas of interest include cloning, expression, and functional analysis of eukaryotic transcription factors.

Background studies of gene expression, DNA-rotein or protein-protein interaction is ideal, but not required.

Send curriculum vitae and names of three references to:

Ed Seto Center for Molecular Medicine Institute of Biotechnology University of Texas Health Science Center 15355 Lambda Drive San Antonio, TX 78245-3207

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NEUROGERONTOLOGY INSTITUTIONAL PHYSICIAN/SCIENTIST PROGRAM

The University of Southern California has recently received an award from the National Institute on Aging for a Physician/Scientist Program for the development of basic and clinical research skills for the study of diseases related to the aging nervous system. This is a five-year salary award with appointments in the Department of Neurology of the School of Medicine and in the School of Gerontology. Candidate must be a U.S. Citizen or have permanent U.S. Resident status and be board eligible in perupology, psychiatry, peuropathology or internal medineurology, psychiatry, neuropathology, or internal medicine. The first two to three years are spent in basic research at the Andrus Gerontology Center or the Hedco Neuroscience Neural Information and Behavioral Science Program. During the third year, the candidate joins the Department of Neurology as Assistant Professor the Department of Neurology as Assistant Professor (tenure-track). He or she continues clinical training in neurogerontology and develops individual research program. Clinical responsibilities are limited to 25% of time and include teaching students, residents, and fellows in

neurogerontology.

This position is open immediately. To apply send curriculum vitae and three letters of recommendation to: Leslie P. Weiner, M.D., Department of Neurology, USC School of Medicine, 1510 San Pablo Street, Los Angeles, CA 90033-4606, and arrange for two days of interviews. For further information, call: 213/342-5793.

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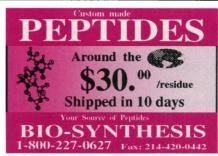
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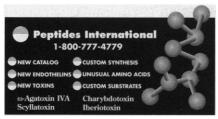
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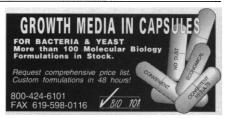
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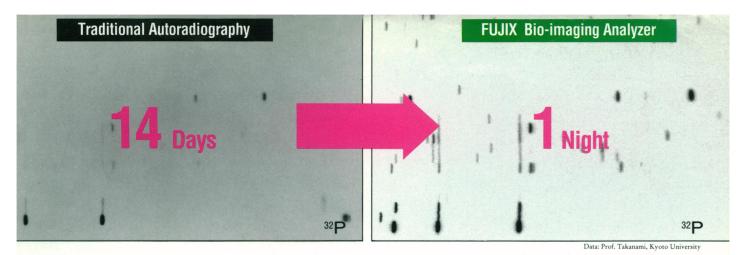
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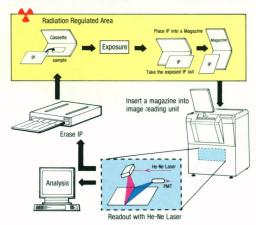
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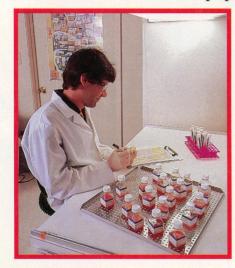
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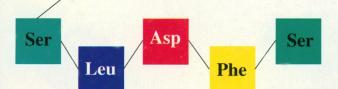
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