PRODUCTS & MATERIALS



A DESCRIPTION OF A SHARE A SHE

Sequencing Pipette

This 3-µl variable volume microdispenser is designed to deliver precise sample amounts into narrow gel slots typical of DNA sequencing operations. It features a pulled polycarbonate tip with either a 0.34- or 0.19-mm outer diameter. The pipette features a rotating plunger assembly to adjust sample volume from 0.25 to 3μ l. The plunger does not come into contact with the sample, and the polycarbonate tips are reusable, autoclavable, and transparent. Drummond Scientific. Circle 140.

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Restriction Enzyme Software

Users can generate circular maps of restriction enzyme digests with the newly expanded Restri program in PC/GENE 6.8. The user can choose a set of restriction enzymes from the database, then automatically perform the restriction digest. Enzyme cut sites appear on a circular map, which includes a handy adjustment tool for repositioning enzyme names with a click of the mouse. This circular mapping capability assists in designing vectors and subclones, excising inserts for hybridization probes or mutagenesis studies, and preparing graphical output for publication and presentation. PC/GENE 6.8 also includes new programs for identifying coding regions and coiledcoil regions. IntelliGenetics. Circle 141.

Thermostable DNA Polymerase

PrimeZyme is a thermostable DNA polymerase derived from *Thermus brockianus*. It is purified free of contaminating exonucleases and endonucleases. With the PrimeZyme reaction and organization buffers, primer extensions to fragments of 6000 bases are possible. Its thermostability is such that even after 2.5 hours at 96°C, the remaining polymerase activity is decreased only to 50%. **Biometra. Circle 142.**

Karl Fisher Titrators

The Aquastar C3000 coulometric Karl Fisher titrator is fast, easy to use, and capable of performing complex titration measurements. Features include a fritless cell and two-button operation. Its coulometric moisture analysis is 50% faster than its popular predecessor, the Aquastar C2000, which means labs can use larger sample



sizes for more reliable results. The Aquastar V5000 volumetric titrator is a high-precision, twin-burette model. Features include one-button reagent standardization, titration, and end-point detection; a gear-driven plunger that improves titrant dosage accuracy; adjustable drop size to satisfy different test needs; and complete operator control of burette speed, titrant volume, titration speed, and more. EM Science. Circle 143.

PCR Product Sequencing

Amplified gene fragments can be sequenced directly using the Sequenase polymerase chain reaction (PCR) product DNA sequencing kit. By eliminating the need for expensive purification steps, the kit significantly reduces the time for sequencing PCR products. Following the amplification step, two enzymes, exonuclease I and shrimp alkaline phosphatase, are added in series to remove single-stranded DNA primers and nucleoside triphosphates, both of which generally interfere with sequencing. After each step, the enzymes are inactivated by heat treatment prior to the Sequenase reaction. Both human genomic DNA and cloned DNA fragments can be sequenced after amplification using this kit. The entire process takes under 3 hours, most of which is thermal cycling time. Amersham International. Circle 144.

Homogenizers

A family of five PowerGen homogenizers and a series of compatible rotor-stator generators can process liquid and tissue samples from 0.03 ml to 30 liters. They are designed for use in DNA extractions, drug metabolism studies, cell extraction and reduction, drug receptor studies, and pesticide extractions. The smallest, the PowerGen 35, is a hand-held battery-powered unit for processing samples from 0.03 ml to 100 ml. It operates at 25,000 rpm and can be pulsed to 30,000 rpm. An accessory transformer provides continuously variable motor speeds. The largest, the PowerGen 1800D, has an 1800-watt motor to simplify processing large volume viscous samples from 1.8 ml to 30 liters. Speed is continuously variable up to 18,000 rpm. Fisher Scientific. Circle 145.

Flourescent Dye Phosphoramidites

Three new fluorescent dye phosphoramidites, 6-FAM, HEX,

and TET, enable direct 5' end labeling of primers and probes at coupling efficiencies greater than 90%. Fluorescently labeled nucleotides pose none of the health or environmental hazards associated with the use, storage, and disposal of radioactive compounds. Designed to facilitate gene analysis on the Model 373A DNA Sequencing System, these products can also be used for in situ hybridization, cell uptake studies, target sequence identification, and other applications that would otherwise use radioactivity. Perkin-Elmer. Circle 146.

Literature

Paradigms: Case Histories in Molecular Modeling focuses on an article "Computer Modeling in Protein Biochemistry" by an expert in the field. **Tripos Associates. Circle 147.**

ULTRA-WARE: The Ultimate Design in Mobile Phase Handling Systems provides information on a complete line of products, including new ones such as valve caps, solvent pickup adapters, sparge port check valves, and a 90-mm conversion base. KON-TES Glass. Circle 148.

DNA Sequencing is a comprehensive product catalog including applications guides to help users overcome common problems. U.S. Biochemical/Amersham International. Circle 149.

Biological Research and Imaging Products Catalog 1994/95 features 136 pages with more than 500 products, including complete systems for protein expression, detection, and purification; analyte detection for fermentation and cell culture; nucleic acid sequencing; electrophoresis; and computer analysis of nucleic acid and protein sequences. Also included is information on Kodak scientific imaging films, emulsions, and electronic imaging equipment. Eastman Kodak, Scientific Imaging Systems. Circle 150.

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

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POSITIONS OPEN

ASSISTANT PROFESSOR HUMAN NUTRITIONAL SCIENCES

The School of Dietetics and Human Nutrition, McGill University, is offering a tenure-track position in Human Nutritional Sciences, available September 1, 1994. The School offers undergraduate training in both Dietetics and Human Nutrition, as well as graduate training in Nutrition, and possesses research strengths in international, basic and applied nutrition areas. The position involves research, teaching fundamental nutrition at both undergraduate and graduate levels, as well as other general faculty duties. Applicants must hold a Ph.D. or equivalent degree in nutritional sciences and have postdoctoral experience. Preference will be given to applicants with a strong background in areas of international, clinical or metabolic nutrition.

Interested applicants should send curriculum vitae, a statement of research direction and copies of relevant publications, and arrange for at least three letters of reference from individuals qualified to judge research, teaching and professional abilities to be sent to: Dr. Peter J. H. Jones, Associate Professor and Director, School of Dietetics and Human Nutrition, Macdon ald Campus of McGill University, 21,111 Lakeshore Road, Ste-Anne-de-Bellevue, Quebec H9X 3V9. Closing date for receipt of applications is July 15, 1994, or until a suitable candidate is located. Macdonald Campus of McGill University is situated 35 kilometers west of downtown Montreal. In accordance with Canadian Immigration requirements, this position is offered in the first instance to Canadian citizens and permanent residents. The language of instruction at McCill University is English. McCill University is committed to Equity in Employment.

ASSISTANT/ASSOCIATE PROFESSOR TENURE-TRACK MOLECULAR AND CELLULAR BIOLOGY OF BREAST CANCER

The Indiana University Cancer Center is searching for a Ph.D. or M.D./Ph.D. investigator with an interest in the cellular and molecular biology of breast cancer. The position will afford the opportunity to coordinate basic laboratory investigation of breast cancer within the context of the growing multidisciplinary Indiana University Cancer Center. Collaborative interactions with clinical investigators in the Departments of Surgery and Medicine as well as basic research investigators in the Department of Biochemistry and Molecular Biology provide a solid basis for investigator-initiated research. Tenuretrack academic appointment and competitive salary in the Departments of Surgery, Biochemistry and Molecular Biology, or Medicine, as appropriate. Attractive laboratory space and start-up support package jointly sponsored by the Cancer Center. Send curriculum vitae and description of current research program and interests to: **George Sledge, M.D., Professor of Medicine, Indiana University Medical Center, 975 West Walnut Street, 1B445, Indianapolis, IN 46202–5121.**

ASSISTANT/ASSOCIATE PROFESSOR OF MO-LECULAR BIOSCIENCES. The Department of Molecular Biosciences, School of Veterinary Medicine, University of California–Davis, is seeking a physiological chemist with advanced training in molecular biology. Ph.D. is required and D.V.M. or equivalent is desirable. This tenure-track position is available after July 1, 1994. Candidates must provide evidence of interest and aptitude in molecular biology and demonstrated potential as a creative research scientist in some area of eukaryotic biological regulatory processes related to animal systems at the molecular and cellular level. It is desirable that the research program would further basic knowledge in biochemistry, cellular physiology and/or nutrition as applied to solving disease-related problems. Candidates should also provide evidence of interest and demonstrated aptitude in teaching basic physiological chemistry and molecular biology. Qualified applicants should apply by letter of intent, detailing special interest in the position, qualifications/experience and research goals/plans as related to the position description. Send curriculum vitae, history of extramural research funding, reprints of three most significant publications and names, addresses and telephone numbers of three (3) references. Applications will be accepted through June 30, 1994, or until a suitable candidate is identified. Mail applications to: Ms. Erin Lindley, Management Services Officer, Department of Molecular Biosciences, School of Veterinary Medicine, University of California, Davis, CA 95016–8741; Telephone: (916) 752-1059, FAX: 916-752-4698. The University of California is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS IN COMPARATIVE MEDICINE VETERINARY CLINICIANS Department of Comparative Medicine Stanford University School of Medicine

The Department of Comparative Medicine has faculty openings for veterinary clinicians as ASSISTANT PRO-FESSOR of Comparative Medicine. Candidates must have received the D.V.M. or V.M.D. degree from an institution Accredited by the American Veterinary Medical Association. Preference will be given to candidates with board certifica-tion in recognized specialties of veterinary medicine (Laboatory Animal Medicine, Internal Medicine, Anesthesiology, Surgery) or with appropriate experience and M.S. or Ph.D. degrees. Applicants should have a demonstrable interest in collaborative research as evidenced by publications in peerreviewed journals. Experience in supervising veterinary tech-nicians is highly desirable. The Department of Comparative Medicine is a basic science department within the School of Medicine. In addition to its academic functions, it also provides the clinical care and management for a large, modern, AAALAC-accredited, central animal facility that includes a 24-hour critical care unit staffed by veterinary technicians. Collaborative research opportunities at Stanford include organ transplantation, immunology, genetics, infec-tious diseases, molecular biology, non-invasive nuclear and magnetic imaging, canine inherited diseases, anesthesia, primate behavior, and transgenic mouse studies among others. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Inter-ested candidates should send a letter containing a description of their career goals and research interests, curriculum vitae, and names and addresses of 5 references, to: Linda C. Cork and names and addresses of 5 references, to: Linda C. Cork, D.V.M., Ph.D., Chairman, Designate, Department of Comparative Medicine, Quad 7 Building 330, Stanford University Medical Center, Stanford, CA 94305–5410. Applications will be reviewed upon receipt and searches will be continued until all positions have been filled.

RESEARCH SCIENTIST M.D. OR Ph.D. Washington University School of Medicine, Renal Division

Washington University seeks a Research Scientist with a background in cellular/molecular biology and a broad interest in polypeptide growth factors and/or developmental biology to join the full-time faculty. Candidates must qualify for appointment as INSTRUCTOR/AS-SISTANT PROFESSOR of Medicine (Research) at Washington University School of Medicine. The candidate will participate in Renal Developmental Center and will pursue original and collaborative studies designed to delineate the roles of polypeptide growth factors in metanephrogenesis using cellular/molecular/organ culture models and/or growth factor expression in mature renal tissue in health and disease. Considerable autonomy will be granted to well-qualified individuals. Tenuretrack positions are available for individuals with expertise in renal developmental biology or other fields directly related to ongoing research.

Send curriculum vitae to: Marc R. Hammerman, M.D., Washington University School of Medicine, Renal Division, 660 South Euclid Avenue, Box 8126, St. Louis, MO 63110.

Washington University is an Equal Opportunity Employer/Affirmative Action Employer, M/F/D/V.

The UAB Epilepsy Center Department of Neurology invites applications for a faculty position at the ASSIST-ANT or ASSOCIATE PROFESSOR level. The individual should have a Ph.D. and a strong background in *in vivo* Nuclear Magnetic Resonance imaging with postdoctoral experience and a proven track record of research and academic performance. The individual will have responsibilities for developing Nuclear Magnetic Resonancebased human and animal epilepsy research protocols, including imaging, spectroscopy and functional Magnetic Resonance Imaging. The Nuclear Magnetic Resonance Center includes a 4.1 tesla instrument, several 1.5 tesla units and a 40 cm 4.7 Tesla for animal experiments. Collaborative research is expected. Strong support from a large comprehensive epilepsy center is available. Start-up funds and competitive salary and benefits are provided. Please send curriculum vitae to: Dr. Ruben Kuzniecky, Department of Neurology, 1719 6th Avenue South, CIRC, Room 312, Birmingham, AL 35294–0021. UAB is an Equal Opprunity/Affirmative Action Employer.



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DIRECTOR of **BACTERIOLOGY R&D**

You will direct the R&D activities of the Bacteriology Department to achieve global licensing of animal vaccines for livestock and companion animals under GLP conditions. Your responsibilities will include guiding the preparation of license applications, production outlines, SOPs and research reports as well as the professional development of personnel within your department. A PhD in Microbiology or a related field and 10 years of post-doctoral experience in Bacteriology R&D are required. You must have proven your leadership & motivation skills as well as your ability to develop effective project teams. A consistent, successful record of licensing veterinary biological vaccines is preferred.

SmithKline Beecham Animal Health provides an excellent compensation and benefits package-including generous relocation assistance-and a flexible, open environment conducive to your personal and professional success. Discover what makes us better...send your confidential C.V., postmarked by June 27, 1994, to: Human Resources, Attn.: 94-52, SmithKline Beecham Animal Health, 601 W. Cornhusker Hwy., Lincoln, NE 68521. Dedicated to Workforce Diversity, we are an Affirmative Action/Equal Opportunity Employer.



TECHNICAL ENTREPRENEURS Together, We Will Make It Happen

Michigan Biotechnology Institute (MBI) is a private, tax-exempt research and business development organization that specializes in industrial and environmental biotechnoloperiopment organization that specializes in industrial and environmental blotechnol-ogy. Grand River Technologies (GRT), our business development subsidiary, finds appropriate commercial outlets for viable technologies. MBI's incubator subsidiary, Bio-Business Incubator of Michigan, provides space and support services so entrepre-neurial firms can get their footing and eventually exit to their own facilities. We are currently seeking innovative bio-based technologies and their champions in the following areas: following areas:

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In return, you'll be expected to lead the effort in raising funds to fuel the program. You may join MBI as an employee, bring your existing business to our business "incubator" or find a new strategic alliance through GRT.



The next step: tell us why you're the right entrepreneur for us. Send a concise, non-confidential summary of your technology including ownership, your commercialization plan and your resume to:

> Dr. J. Gregory Zeikus President and CEO Michigan Biotechnology Institute P.O. Box 27609 • Lansing, MI 48909

MBI is an equal opportunity employer/institute.

Developmental Neurobiologist

Developmental Neurobiologist with five or more years postdoctoral experience to conduct an independent research program focusing on the molecular mechanisms responsible for regulating the development of the central nervous system using transgenic animals to study the relationship between epigenetic signals and the neurogenic program. Bibliography must reflect expertise in molecular biology, developmental neurobiology, neuroanatomy and all aspects of mouse transgenic technology.

Salary range \$35,000 - \$70,000.

Send CV and names of 3 references to:

Michael J. Brownstein, M.D., Ph.D., Chief, Laboratory of Cell Biology, 9000 Rockville Pike, Bldg. 36, Room 3A31, Bethesda, Maryland 20892.

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Tenure-Track And Postdoctoral Opportunities.

Listed below are a few of the outstanding opportunities for conducting research that are now available at the National Institutes of Health.

Tenure-Track Position Assistant Professor Equivalent **Cell Biology** Edward D. Korn, PhD

Position available to develop an independent research program that will complement ongoing research on the cytoskeleton, endocytosis, membrane trafficking, and actomyosin-dependent cell motility. Candidates should have experience in biochemistry, cell biology, and microscopy (electron, light and fluorescence). Support by up to three postdoctoral fellows and technicians and a fully equipped light and electron microscopy laboratory will be provided. Willingness to collaborate and/or share the microscopy facility are essential. The candidate will be evaluated for tenure within a period not to exceed six years. A two-page statement of research interests and goals should be submitted in addition to the three letters of recommendation. Laboratory of Cell Biology (OE-47), NHLBI, Building 3, Room B1-22.

Postdoctoral Positions Biochemistry and Molecular Biology Clifton E. Barry, III, PhD

The biosynthesis, structure, and function of virulence-associated lipids and glycolipids in the cell wall of Mycobacterium tuberculosis are currently under investigation. Particular emphasis is placed on defining, at both the genetic and enzymological level, the production of these components. In the future, specific roles for lipids unique to virulent strains will be sought using in vitro and in vivo models of tuberculosis. Applicants must have less than five years postdoctoral experience. Laboratory of Intracellular Para-sites (OE-47), NIAID, Rocky Mountain Laboratories, 903 South Fourth Street, Hamilton, MT 59840.

DNA Repair Kenneth H. Kraemer, MD

Molecular, cellular, and clinical studies of DNA repair in human cancer-prone genetic diseases are being performed. Shuttle vectors are utilized to examine the molecular basis of cellular hypermutability in xeroderma pigmentosum and familial melanoma. Applicants must be US citizens or permanent residents and have less than five years postdoctoral experience. Laboratory of Molecular Carcinogenesis (OE-47), NCI, Building 37, Room 3E24.

Molecular Biology and Genetics Stephen J. Marx, MD

The genes regulating growth and secretion in endocrinerelated tissues are being studied. Emphasis is upon processes whose disruption cause acquired or hereditary disease. Multiple endocrine neoplasia Type 1 is under study as a model for simultaneous dysfunction in several hormone-secretory tissues. The fibroblast growth factor gene family is also being analyzed. Applicants must have less than five years postdoctoral experience. Metabolic Disease Branch (OE-47), NIDDK, Building 10, Room 9C101.

Molecular Biology and Immunology Michael A. Steller, MD

Transfections using anti-sense constructs are being used to target critical growth factor receptor genes in an attempt to develop novel treatments for patients with gynecologic malignancies. Future studies will utilize molecular biological and immunological techniques to develop an animal model to explore the in vivo use of transfected tumor cells in a vaccination protocol. Applicants must have less than five years postdoctoral experience. Surgery Branch (OE-47), NCI, Building 10, Room 2B42.

Molecular Endocrinology Sheue-yann Cheng, PhD

The molecular mechanisms mediating thyroid hormone induced growth, development, and differentiation are being studied with particular emphasis on the regulation of the transcriptional activity of the receptors. The role of phosphorylation on the interaction of receptors with the tissue specific factors and basal transcription factors are being examined and the receptor kinases will be identified and characterized. A strong background in molecular biology and biochemistry is preferred. Applicants must have less than five years postdoctoral experience. Laboratory of Molecular Biology (OE-47), NCI, Building 37, Room 4B09.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (wylbur.cu.nih.gov) or via modem (1,3014022221 or 1,8003582221) with modem parameters set at "7,Even,1". When connected to NIH, type in ",vt100" for termi-nal emulation, "F5E" for initial, and "AJL1" for account number. The Postdoctoral Research Fellowship Opportunities catalog,

which describes additional opportunities at the NIH, may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov" and port "70". Select Grants and Research Information to reveal the NIH Office of Education directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

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



National Institutes Of Health

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POSITIONS OPEN

RESEARCH TOXICOLOGIST POSITION

The Maine Toxicology Institute, a joint program between Eastern Maine Medical Center and University of Maine, is sponsoring a research position at the AS-SISTANT/ASSOCIATE PROFESSOR level at the University of Maine. We are seeking an established individual with a record of productivity and support in an area of biochemical toxicology. As the position evolves, the successful individual will be expected to generate partial salary support from outside sources. The research laboratory will be housed within the academic unit most appropriate to the individual's research interests. Salary ests. Salary is commensurate with experience and the individual will be eligible for all University benefits. The initial three-year non-tenure-track appointment is subject to renewal, contingent upon continued funding, with the possibility of shifting to a tenure-track position. Send cover letter, curruculum vitae, research plans, and names and addresses of three references to: Dr. John T. Singer, and addresses of three references to: Dr. John I. Singer, Toxicology Search Committee, Department of Bio-chemistry, Microbiology and Molecular Biology, 5735 Hitchner Hall, University of Maine, Orono, ME 04469–5735; Telephone: (207) 581-2808. Re-view of applications will begin July 1, 1994, and continue until a suitable candidate has been located. Women and minorities are encouraged to apply. The University of Maine and Eastern Maine Medical Center are Affirmative Action/ Equal Employment Opportunity Employers.

ASSISTANT PROFESSOR CARDIOVASCULAR BIOLOGY LABORATORY

The Cardiovascular Biology Laboratory of the Har-vard School of Public Health, directed by **Dr. Edgar Haber**, is searching for an Assistant Professor with expertise and several years of research experience in molecular biology and immunology. Priority will be given to individuals with a record of investigation in the area of transplantation arteriosclerosis. Responsibilities include teaching and independent as well as collabora-tive research. An M.D. degree and board certification in cardiology are required because of anticipated extension of this work to clinical investigation. Applicants should send curriculum vitae and names of three references to: Dr. Tun-Hou Lee, Department of Cancer Biology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

Harvard University is committed to increasing the representation of women and minority members among its faculty and particularly encourages applications from such candidates.

ASSISTANT ADJUNCT PROFESSOR AND POSTDOCTORAL POSITIONS available to study dopamine and 5HT receptor. Techniques include microdialysis, autoradiography, and molecular biology. Send curriculum vitae and names of three references to: Daniel Truong, M.D., Neurology, 154 Med Surge I, UCI, Irvine, CA 92717. Refer to Position #94-4. UCI, rooted in education, enriched by diversity.

FACULTY POSITION IN EPIDEMIOLOGY School of Public Health University of California, Berkeley

The School of Public Health invites applications for a tenure-track position in epidemiology at the ASSIST-ANT PROFESSOR level, beginning January 1, 1995, or soon thereafter. The successful candidate is expected to develop and maintain an active research program in social epidemiology, preferably in the area of violence and/or injuries, and to participate in the teaching pro-gram, including the supervision of doctoral thesis research.

Candidate should have a doctoral, medical, or equivalent degree and evidence of research experience in epide-

Applicants should send a letter with a statement of interest and qualifications, as well as detailed curriculum vitae, and arrange to have at least three letters of reference sent to:

> Chair, Search Committee for Assistant Professor of Epidemiology School of Public Health 19 Earl Warren Hall University of California at Berkeley Berkeley, CA 94720

Deadline for applications is August 1, 1994. The University of California is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

The Department of Physiology at Nova Southeastern University invites applications for a full-time ASSIST-ANT PROFESSOR position. Candidates must have a doctoral degree in physiology and a commitment to excellence in teaching. Please send curriculum vitae and Lyons, Ph.D., Department of Physiology, Nova Southeastern University, 1750 NE 167th Street, North Miami Beach, FL 33162.

UCLA ASSISTANT PROFESSOR TENURE-TRACK FACULTY POSITION

The Department of Physiology at the UCLA School of Medicine invites well-qualified individuals to apply for a tenure-track Assistant Professor position aimed towards the development of a Cell Physiology Imaging Center. Candidates are expected to bring a strong background in areas of cell biology such as secretory physiology, neuro-biology and signal transduction. Qualifications include a Ph.D. in a biomedical discipline and proficiency in confocal fluorescence detection techniques, pulsed-laser imaging, computational image processing, and electro-physiological methodology. Please respond by sending curriculum vitae and names of three references, by July 1, Curricultum vitae and names of three references, by July 1, 1994, to: Chair, Imaging Search Committee, Depart-ment of Physiology, UCLA School of Medicine, Los Angeles, CA 90024–1741. The University of California is an Affirmative Action/ Equal Opportunity Employer.

BASIC SCIENCE GERIATRICIAN. Full-time faculty position available at the Cleveland VA Medical Center, University Hospitals of Cleveland, and Case Western Reserve University for a physician scientist at the ASSISTANT or ASSOCIATE PROFESSOR level in aging research. Laboratory space and a minimum of 20 hours per week will be at the VA. Candidate will be eligible for VA grant support. The successful recruit will eligible for VA grant support. The successful recruit will join existing divisional research in aging vascular and adrenal physiology, which is complemented by a large number of NIA-funded investigators on campus, and lead the further development of basic aging research. Additional recruitment opportunities will be made avail-able to the appropriate candidate. Geriatric Division is supported by an NIA Research Training Fellowship program, a Claude Pepper Center, and Hartford Center of Excellence. Send curriculum vitae and letter of inquiry to scott Mader. M.D. ACOS for Geriatrice and to: Scott Mader, M.D., ACOS for Geriatrics and Extended Care (18W), VA Medical Center, 10701 East Boulevard, Cleveland, OH 44106. Department of Veterans Affairs is an Equal Opportunity Employer. Applicant subject to random drug testing prior to employment.

DIRECTOR, UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES DIVISION OF BIOMEDICAL SCIENCES UNIVERSITY OF CALIFORNIA, RIVERSIDE (UCR)

Responsible for leadership of the research and educational activities of the Division of Biomedical Sciences at UCR. Duties include leadership of and active participa-tion in the research activities of the Divisional faculty at UCR and the Ph.D. program in Biomedical Sciences; supervision of an accelerated 7-year educational program leading to the B.S. degree from UCR and the M.D. degree from the UCLA School of Medicine; serving as Chairperson of the Division of Biomedical Sciences (15 Charperson of the Division of Dionicular Sciences (10) ladder-rank faculty positions in basic Medical Sciences disciplines at UCR and seven adjunct positions at the associated Harbor/UCLA Medical Center teaching facility); and maintaining liaison among UCR, UCLA, Har-bor/UCLA Medical Center, the UC Office of the President, and other applicable state and national agencies. Requires: (a) Ph.D. or M.D. degree; (b) a strong and active research program in biomedical sciences; (c) famil-iarity with medical school basic sciences instruction; (d) evidence of success in managing strong academic pro-grams; (e) qualification for appointment as a Full Pro-fessor in the University of California system. Starting date: July 1, 1995.

Please send nominations or letter of application, résumé and names of at least three references by August 15, 1994, to: BMSP Program Director Search Commit-1994, 10: BMSP Frogram Director Search Commit-tee, Division of Biomedical Sciences, University of California, Riverside, CA 92521–0121. The University of California is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

CHAIR DEPARTMENT OF BIOCHEMISTRY, BIOPHYSICS AND GENETICS

The University of Colorado Health Sciences Center invites applications and nominations for the Chair in the Department of Biochemistry, Biophysics and Genetics. Department of Biochemistry, Biophysics and Genetics. Department members interact strongly with Interdisci-plinary Programs in Molecular Biology and Neuro-sciences. The University seeks an outstanding scientist who has an internationally recognized research program, an excellent record of scientific contributions and a commitment to excellence in teaching of medical and graduate students

Letters of application or nomination should be sent to: Dr. Boris Tabakoff, Chairman, Biochemistry, Bio-physics and Genetics Chair Search Committee, De-partment of Pharmacology, Box C-236, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.

Applications should include curriculum vitae, list of publications, a summary of academic, administrative and teaching experience, and a list of references. Deadline for application is July 22, 1994.

Applications from women and minority groups are encour-aged. The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

APPOINTMENT OF DIRECTOR NATIONAL FACILITY FOR ANIMAL TISSUE AND CELL CULTURE (NFATCC), PUNE, INDIA

NFATCC is devoted to research and development in animal/human cell/tissue culture and related technoloand an and the second s industry.

Nominations/applications are invited from Indian citizens, preferably below 55 years. The Committee is looking for an outstanding scientist in modern cell biology with proven

leadership and managerial qualities. Nominations/applications with complete curriculum vitae may be sent before June 30, 1994, to: Chairman Search-cum-Selection Committee for NFATCC Director, c/o Department of Biotechnology, Block Number II, 7th floor, CGO Complex, Lodi Road, New Delhi–110 003, India.

POSTDOCTORAL POSITION

NONLINEAR ANALYSIS OF SINGLE CHAN-NEL RECORDINGS.

To record currents from single ion channels and to analyze that data using fractals, chaos (nonlinear dy-namics), neural networks, and random walks to determine the energy structure and motions within ion channel proteins. Requires experience in patch clamp electrophysiology experiments as well as knowledge of of neuroscientists, psychologists, mathematicians, and physicists using nonlinear methods to study the brain and other biological systems. Dr. Larry S. Liebovitch, Center for Complex Systems, Florida Atlantic Uni-versity, 777 Glades Road, Boca Raton, FL 33431. Internet: LIEBOVITCH@WALT.CCS.FAU.EDU. FAU is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available September 1, 1994, to investigate DNA adducts as molecular dosimeters of occupational and chemotherapeutic agents. Studies will employ the use of ³²P-postlabeling and electrochemical detection for adduct measurements. Experience in measurement of DNA adducts is desirable. Applicants should send curriculum vitae and description of research experience to: Dr. W.J. Bodell, University of California, Box-0806, San Francisco, CA 94143– 0806. UCSF is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study both Ca channel modulation, and the regulation of Ca homeostasis in heart muscle, smooth muscle, and cultured neurons. Techniques used in the laboratory include patch clamp, measurement of intracellular Ca with fluo-rescent indicators, and confocal microscopy. Send curric-ulum vitae, names of three references, and date of availability to: Dr. Robert Hadley, Department of Pharmacology University of Konstein. Pharmacology, University of Kentucky, MS-372 UKMC, Lexington, KY 40536. The University of Ken-tucky is an Equal Opportunity/Affirmative Action Employer.



MEMORIAL SLOAN KETTERING CANCER CENTER Department of Human Genetics

This newly created Department will start its activity on 1st October 1994; it will focus research on the genetic basis of malignancy, the identification of cancer susceptibility genes and gene therapy. **Postdoctoral positions** will be available in several laboratories, as follows:

- R CHAGANTI-Genetic mechanisms of transformation and differentiation in human tumors
- S JHANWAR–Genetic alterations associated with multi-step carcinogenesis in epithelial tumors
- M LADANYI (Department of Pathology)–Genetic alterations in sarcomas and Ki-1 lymphoma: molecular diagnosis
- L LUZZATTO-Pathogenesis of PNH and gene therapy of inherited diseases
- K OFFIT-Mapping of genetic changes in non-Hodgkin's lymphoma and clinical correlations
- P P PANDOLFI-Molecular basis of APL and mouse models of human diseases by homologous recombination

Appropriately qualified young investigators (PhD, MD, or MD/ PhD) interested in research in the above areas of Human Genetics are encouraged to contact any of these Faculty Members or the chairman of the department of Human Genetics, MSKCC, 1275 York Avenue, New York, NY 10021, USA. Please supply full curriculum vitae, bibliography and names of three academic references.

> MSKCC is an Equal Opportunity/ Affirmative Action Employer

ASSISTANT DIRECTOR

Bone Biologist

SmithKline Beecham, a worldwide leader in pharmaceutical research, is seeking an Assistant Director for the Bone Biology Unit within the Department of Cellular Biochemistry. This.Unit's 20 members carry out basic and applied research on many aspects of the cellular mechanisms involved in bone resorption and formation.

The selected individual will plan, implement and supervise research aimed at the discovery, evaluation and development of novel therapeutic agents for osteoporosis. In particular, using expertise in the use of appropriate animal models, the individual will be involved in hypothesis testing *in vivo*, and the final selection of development candidate molecules, as well as take a leadership role in a variety of multidisciplinary osteoporosis research programs.

The successful candidate will have a Ph.D. in Bone Biology, or related relevant area and a minimum of 4 years post doctoral experience including expertise in both small and large animal models of bone turnover. The successful candidate will have an excellent record of scientific achievement as evident from publications, patents, symposia and presentations. Supervisory experience, excellent communications skills, and the ability to work effectively with individuals of varied backgrounds and disciplines are required. Industry oxperience is preferred.

Our state-of-the-art research facility is located in suburban Philadelphia. We offer a competitive compensation/benefits package and a stimulating team environment. For confidential consideration, send your resume to: SmithKline Beecham Pharmaceuticals, Dept. H0105, P.O. Box 401, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



PUBLIC HEALTH SERVICE NATIONAL INSTITUTE OF HEALTH NATIONAL INSTITUTE ON DRUG ABUSE

Director

Intramural Research Program at the Addiction Research Center

A Senior Executive Service Vacancy Location: Baltimore, Maryland

The National Institute on Drug Abuse (NIDA) invites nominations and applications for this Senior Executive Service position, located in Baltimore, Maryland.

The Director of NIDA's Intramural Research Program located at the Addiction Research Center (ARC) is responsible for the management and direction of the major Federal intramural research facility focusing on drug abuse research. The Director is responsible for planning, evaluating and directing all aspects of the preclinical and clinical intramural research program for the National Institute on Drug Abuse (NIDA). The Director manages programs of multidisciplinary laboratory and clinical research and participates in the overall development and implementation of Institute scientific objectives.

Desirable qualifications include an M.D. or Ph.D. degree with extensive postgraduate research experience; and experience in the scientific and administrative management of research programs which has established the candidate as an authority in preclinical or clinical research approaches relevant to drug abuse or related health disorders.

ES-1 through ES-6 (currently \$92,900 to \$115,700 plus 4.23% locality rate). A recruitment bonus of up to 25% 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% may be available to a permanent federal employee who must relocate to accept this position, subject to individual approval. Physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per year. Submit applications (Application for Federal Employment, SF-171, accompanied by a current curriculum vitae and bibliography to:

Ms. Maryann Pafitis NIDA Personnel Management Branch 5600 Fishers Lane, Room 10-21 Rockville, Maryland 20857 Phone (301) 443-9593

Complete application materials (which MUST include SF-171) must be received by June 30, 1994.

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, membership or non-membership in an employee organization.



NIDA is an Equal Opportunity Employer

IMMUNOLOGIST/VIROLOGIST

PA No. 5

Ph.D. or M.D. needed with experience in murine retrovirology, immunology, lymphomagenesis and genetics and with knowledge of T and B cell development and effector cell function. Experience in preparation and quantitation of MuLV stocks, infectious center tests, Fv-1 typing, lymphoid cell separation, flow cytometry and transgenic mice required.

Salary range \$28,000-\$36,000 will be commensurate with experience.

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

> Herbert C. Morse, III, M.D. Chief, Laboratory of Immunopathology NIAID, NIH Building 7, Room 302 9000 Rockville Pike Bethesda, MD 20892 301-496-6379 301-402-0077 fax

Applications must be received by June 30, 1994 United States citizenship required NIH is an Equal Opportunity Employer Position targeted for EEO recruitment efforts.

Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1994-95 for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, and tumor immunology. Training is available in recombinant DNA technology, gene expression, DNA replication, mutagenesis, regulation of cellular proliferation, growth factors, molecular immunology, molecular genetics of cancer, and combined programs. Unique training resources and core facilities are supported by the NCIdesignated UNC Lineberger Comprehensive Cancer Center

Preceptors are: Steven Bachenheimer, Albert Baldwin, Keith Burridge, Stephen Chaney, David Clemmons, Marila Cordeiro-Stone, Channing Der, H. Shelton Earp, Jeffrey Frelinger, Frank French, Jack Griffith, Stephen Haskill, Geoffrey Haughton, Brian Herman, Clyde Hutchinson III, Eng-Shang Huang, Ken-neth Jacobson, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Edison Liu, Patricia Maness-Tidwell, William Marzluff, Beverly Mitchell, Joseph Pagano, Nancy Raab-Traub, James Raleigh, R. Jude Samulski, Aziz Sancar, Ronald Swanstrom, Ronald Thurman, Jeny Ting, Thea Tisty, Michael Topal, Terry Van Dyke, Jean-Michel Vos, Elizabeth Wilson, Bernard Weissman, and Yue Xiong

Candidates must be U.S. citizens or permanent residents. Send for brochure listing faculty and apply with curriculum vitae, three letters of recommendation, a statement of research interests and graduate school records to:

> Joseph S. Pagano, M.D. CB# 7295 UNC Lineberger Comprehensive Cancer Center School of Medicine University of North Carolina at Chapel Hill Chapel Hill, NC 27599-7295

UNC's Comprehensive Cancer Center is an Affirmative Action/ Equal Opportunity Employer. Minority applicants are encouraged voluntarily to identify themselves.



Director **Genetic Toxicology Division**

Health Effects Research Laboratory

Research Triangle Park, NC

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Director, Genetic Toxicology Division (GTD), Health Effects Research Laboratory (HERL). This position is located in the Research Triangle Park, NC. This is a permanent, full-time position with a salary range of \$86,867 to \$89,265 per annum commensurate with qualifications. Additional salary incentives may be available.

HERL has a staff of approximately 230 people and about half hold doctoral level degrees. The laboratory has a diverse program which includes in vitro, animal, and human research designed to address issues related to the health effects of chemical and biological pollutants in air and water.

Presently, the Genetic Toxicology Division is a multidisciplinary carcinogenesis program with an EPA staff of 33 and 32 on-site contractor personnel. The Division recently redirected its research program to fully focus on issues, assumptions, and uncertainties in cancer risk assessment. The refocusing has created a Division that is a focal point for planning, conducting, coordinating, supporting, and evaluating research to improve cancer risk assessment. GTD has established a strong research program in environmental carcinogen-esis as reflected by its influence in professional organizations, contributions to the regulatory offices of the Agency, impact on Agency guidelines and policy, involvement in international programs, and by the many publications and presentations of its staff.

The incumbent directs and manages the carcinogenesis research program. This program includes both intramural investigations and extramural arrangements with other governmen-tal and nongovernmental organizations. The incumbent provides scientific and managerial leadership of the program, develops the program to meet the evolving needs of EPA, presents the program to both EPA and non-EPA audiences, develops and manages budgets, supervises the staff, directs the progress of the program, and ensures the highest possible scientific quality and productivity.

The preferred candidate for this position would possess the following qualifications:

- Advanced degree in a biological, biochemical, toxicological, or medical discipline. Within any of these areas he/she must have a least six years of professional research experience. Applicable graduate course work may be substituted for a portion of the preferred experience.
 Experience as a supervisor of a scientific/professional staff.
 Recognized scientific expertise as evidenced by multiple peer-reviewed publications, presentational constraintions.
- presentations at national international organizations.
- Proven ability to provide leadership in directing the development and progress of a creative and effective multidisciplinary carcinogenesis research program. 4 5. U.S. citizenship is required.

Forward curriculum vitae and names of three references prior to August 1, 1994 to: Dr. Harold Zenick, c/o Dorothy Carr, HRMD (MD-29), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.



MEMORIAL SLOAN KETTERING CANCER CENTER Department of Human Genetics Assistant Member/Associate Member

This newly created Department will start its activity on 1st October 1994, and will focus on the genetic basis of malignancy, the identification of cancer susceptibility genes, genetic epidemiology and genetic counselling for familial cancer, animal models of human diseases and gene therapy.

Two tenure-track Faculty positions are available and will be well supported.

Young investigators (PhD, MD, or MD/PhD) who have a record of productive research experience and who are interested in any aspect of Human Genetics are encouraged to contact Dr L Luzzatto, chairman of the department of Human Genetics, MSKCC, 1275 York Avenue, New York, NY 10021, USA [until 1st September also Department of Haematology, RPMS, Ducane Road, London W12 ONN, UK (phone +44 81 740 3234; fax +44 81 742 9335)]. Please supply full curriculum vitae, bibliography, a statement of research intent, and the names of three academic references.

> MSKCC is an Equal Opportunity/ Affirmative Action Employer

U.S. EPA Office of Research and Development Estimation of Volatilization Rates Request for Preproposals

The U.S. EPA Office of Health and Environmental Assessment (OHEA) is seeking preproposals for financial assistance by cooperative agreements with non-profit or not-for-profit research organizations for research on the estimation of volatilization rates of chemicals from water. Such agreement require a minimum of 5% cost sharing by the recipient organization. A high degree of collaboration with the EPA researchers involved in these activities is required (e.g., joint planning and conduct of most tasks and co-authored publications). The proposed work will support the research and development of methodologies to estimate exposure to chemicals that volatilize during household use of contaminated water.

Proposals should follow a two-phase approach: (1) conduct validation of existing models that relate the volatilization rate and/or fraction with diffusion coefficients; (2) if validation is not feasible, conduct volatilization experiments to determine volatilization rates for various chemicals to cover a wide range of values for Henry's Law constant using systems that simulate household water uses. Proposals should include approaches to determine an empirical relationship expressing volatilization rate and/or fraction as a function of Henry's Law constant and possibly other parameters (e.g., temperature).

Proposals will be evaluated by expert review panels. The review will be based on the proposers experience with similar research activities, qualifications of the proposed staff and their understanding of appropriate research approaches and technologies, the relevancy to the mission of OHEA, and the feasibility of the proposed working arrangement with EPA staff. The applicant's proposed budget will also be considered in the selection process. A quality assurance narrative (QAN) will be required as part of the proposal. EPA's yearly share of the resources for the research area is expected to be no more than \$75,000 for each of the two years.

ONLY STATE AND LOCAL GOVERNMENTS, NONPROFIT RESEARCH INSTITUTIONS OF HIGHER EDUCATION, INDIVIDUALS, OR NOT-FOR-PROFIT RESEARCH ORGANIZATIONS THAT ARE ELIGIBLE TO RECEIVE FEDERAL ASSISTANCE UNDER THE FOLLOWING ACTS SHOULD APPLY: Statute authority for these cooperative agreements is found in Section 8001 of the Solid Waste Disposal Act as amended by the Resource Conservation Act of 1976; Public Law 94-580; 42 U.S.C. 6901: Toxic Substances Control Act; 15 U.S.C. 2609; Public Law 94-469: Comprehensive Environmental Response Compensation, and Liability Act as amended; Public Law 96-510; 42 U.S.C.A.9601: Federal Insecticide, Fungicide and Rodenticide Act, as amended (FIFRA); & U.S.C. 136-136y; Public Law 96-539. Interested applicants must be eligible to receive Federal Assistance under the Code of Federal Regulations (CFR) Part 30 General Regulations for Assistance Programs, and Part 40-Research and Demonstration Grants. Additional technical instructions and appropriate application materials will be provided upon request. Responses to this advertisement must be received or postmarked by close of business day (COB) July 29, 1994 to Ms Isabella Hodge, Office of Research and Development (8603), U.S. EPA, 401 M Street S.W., Washington DC 20460. Telephone responses will not be accepted.

Tumor Biology

At Amgen, you'll discover a research environment that emphasizes collaboration, intellectual honesty, scientific integrity, and a supportive culture. This unique approach has helped us grow into a global biotechnology leader in just thirteen years.

RESEARCH SCIENTIST

The Tumor Biology Department seeks a PhD level Research Scientist with 4+ years' postdoctoral in vivo research experience on immunological and nonimmunological mechanisms of tumor growth control. Must be capable of conducting independent research using rodent models of tumor growth and metastasis, including the use of human xenografts. Candidates with experience in the use of either direct-acting cytotoxic chemicals or immune modulation to control tumor growth and metastasis will be considered.

At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks' vacation. Please FAX/mail your resume/c.v. to: FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code OA-SC-AC-002, Amgen Center, Thousand Oaks, CA 91320-1789. For additional information regarding Amgen's recruitment process, please call (805) 447-4150. Principals only, please. EEO-Affirmative Action Employer M/F/D/V. We recognize that diverse perspectives are a key factor in the process of discovery.



Molecular Biologist

National Institutes of Health. Molecular biologist needed with experience in cloning, sequenc-ing, and expression of rotavirus genes. Knowledge required of relevance of gene product(s) associated with induction of protective antibodies for rotavirus vaccine development for humans. Experience in deterfor mining interrelationships of various rotaviruses by study of antibodies to expressed proteins by various immunologic assays. This is a tenured position. NIH is an Equal Opportunity Employer. Position targeted for EEO recruitment efforts. U.S. citizenship required.

Salary range: \$56,627 to \$73,619

Qualified and interested candidates should send curriculum vitae and names and addresses of three (3) references to:

> NIAID Personnel Bldg. 31/Room 7A-20 9000 Rockville Pike Bethesda, MD 20892 ATTN: Kristi Daniel



POSITIONS OPEN

THE UNIVERSITY OF LIVERPOOL DEPARTMENT OF GENETICS AND MICROBIOLOGY LECTURE IN ANIMAL OF HUMAN MOLECULAR GENETICS Initial salary within the range £13,601 to £25,107 per annum

The Department of Genetics and Microbiology is seeking to appoint a Lecturer to complement our estab-lished expertise in microbial, plant, population and cyto-genetics. The post is tenable from 1 October 1994. The successful candidate would be expected to establish an independent research group and to make a major contribution to the development of the teaching of human genetics. We wish to encourage applications from candi-dates with research interests in any aspect of animal or human molecular genetics-appropriate areas include developmental genetics, molecular population genetics or genetic aspects of disease. However, the research field is of less importance that the quality of the applicant. Opportunities exist for the development of collaborative projects within the Schools of Life Sciences and Mediciné

Informal enquiries can be made to: Professor P. Strike on 051 794 3620, or FAX: 051 794 3655. Quote ref: B/276. Closing date: 31 July 1994. Applications by curriculum vitae with the names of

three references, should be received by the Director of **Personnel(B)**, The University, P.O. Box 147, Liverpool, L69 3BX, from whom further particulars may be obtained.

WORKING TOWARDS EQUAL OPPORTUNITIES.

FULBRIGHT POSTDOCTORAL PROGRAM IN ISRAEL 1995 Grants for U.S. Postdoctoral Scholars

The United States-Israel Educational Foundation USIEF) offers Fulbright awards to postdoctoral schol-ars at Israeli institutions of higher learning. Awards are for ten months, renewable up to twenty-one months. Applications in all disciplines accepted. Preference to scholars up to the age of thirty-five, who have not previously studied or done research in Israel and to those who have completed their doctorate within two years prior to application. Stipends in 1994 ranged from \$18,350 to \$64,400, depending on length of stay and number of dependents. Twenty-one month awards in-clude additional round-trip ticket to the United States. Application deadline: October 31, 1994. Apply to: In-stitute of International Education (IIE), Study Abroad Programs, 809 United Nations Plaza, New York, NY 10017–3580; Telephone: 212-984-5327 or campus Fulbright advisor.

POSTDOCTORAL POSITIONS Study microvascular function at the University of Rochester

Research opportunities are immediately available in microvascular physiology, pharmacology, and hemody-namics in the laboratories of **Dr. R.J. Rivers** (Depart-ment of Anesthesiology), **Dr. I.H. Sarelius** (Depart-ment of Biophysics), and **Dr. G.R. Cokelet** (Depart-ment of Biophysics). Current emphasis includes physiol-near of methods and the comparisation of a set a work where of ogy of vascular cell communication; local regulation of blood flow; oxygen transport and capillary hemodynamics; and biophysics of leukocyte/endothelial cell interac-tions. Applications, including curriculum vitae and names of three references, should be sent to: Dr. I.H. Sarelius, Department of Biophysics, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642.

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

POSTDOCTORAL POSITION: Seeking individual with a strong background in molecular biology, biochemistry, or electrophysiology to join laboratory studying signal transduction and adaptation in photorecep-tors, olfactory neurons, and CNS neurons. Research includes studies of the structure, function and modula-tion of cyclic nucleotide-gated channels. Competitive salary and fringe benefits available. Send curriculum vitae to: Dr. Richard H. Kramer, Department of Molecular and Cellular Pharmacology, P.O. Box 016189, Uni-versity of Miami School of Medicine, Miami, FL 33101. FAX: (305) 548-4555. Equal Opportunity Employer.

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POSITIONS OPEN

POSTDOCTORAL POSITION available to study the cellular and biochemical properties of **prion pro-teins**, which play a key role in the pathogenesis of several neurodegenerative diseases in humans and animals, including Creutzfeldt-Jakob disease, kuru, and scrapie. Please send curriculum vitae, a statement of research interests and experience, and the names and addresses of three references to: Dr. David A. Harris, Department of Cell Biology and Physiology, Washington Univer-sity School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. An Equal Opportunity Employer.

POSTDOCTORAL POSITION

Immediate opening for a Ph.D. in synthetic or bioorganic chemistry to use chemical approaches to study biological problems in a molecular biology/biochemistry laboratory. Areas of interest include: DNA-protein interlaboratory. Areas of interest include: DNA-protein inter-actions, RNA-protein interactions, detection of macromolecular interactions by chemical crosslinking, development of novel nucleotide analogs and, in particular, sequence/structure-specific interaction of small molecules with RNA (see ZAPP et al., 1993, *Cell* 74, 969).

Send curriculum vitae and names of 3 references to: Dr. Michael R. Green, Program in Molecular Medicine, University of Massachusetts Medical Center, 373 Plantation Street, Worcester, MA 01605. Univer-sity of Massachusetts Medical Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION YALE MEDICAL SCHOOL

We are studying regulation of gene expression, recom-bination and somatic hypermutation in primary and EBV-transformed mammalian B cells. Please send curriculum vitae and three letters of reference to: Dr. Nancy Maizels, Department of Molecular Biophysics and Biochemistry, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.

POSTDOCTORAL POSITION

Postdoctoral position available to evaluate in vitro human lymphopoiesis and its perturbations by HIV in a Molecular hematology laboratory affiliated with Harvard Medical School. Send curriculum vitae and a list of references to: David T. Scadden, M.D., Hematology/ Oncology Research, Deaconess Hospital, 185 Pilgrim Road, Boston, MA 02215.

POSTDOCTORAL POSITION Seattle VA/University of Washington. A postdoctoral position is avail-able immediately to study signal transduction in myeloid cells. The successful candidate will use a wide variety of molecular techniques to identify critical molecules that interact with hematopoietic kinases. Two years of sup-port is available. *Must be a U.S. citizen*. For further information send a copy of curriculum vitae and state-Medical Oncology (111 ONC), Seattle VA Medical Center, 1660 Columbian Way South, Seattle, WA 98108. FAX: 206-764-2851.

POSTDOCTORAL POSITIONS IN CELL/MO-LECULAR BIOLOGY. Postdoctoral fellowships are available to participate in a number of ongoing research Komunicki: regulation of acrobic/anaerobic transitions in parasitic helminths. •Keith Johnson/Margaret Wheelock: cadherin mediated cell/cell adhesion. •Lirim Shemshedini: interactions between nuclear receptors and AP-1. Send curriculum vitae, date of availability and names of three references to: Department of Biology, University of Toledo, Toledo, OH 43606. The University of Toledo is an Equal Opportunity/Affirmative Ac-tion Employer.

POSTDOCTORAL POSITION available immediately to study functional properties of bacterial ion channels with electrophysiological techniques. Projects include the use of patch clamp to investigate the modu-lation and structure/function relationships of E. coli porins. Experience with electrophysiology, preferentially patch clamp, required. Send curriculum vitae and three letters of recommendation to: Dr. Anne Delcour, Departments of Biology and Biochemical and Biophys-ical Sciences, University of Houston, Houston, TX 77204–5513. The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans and persons with disabilities are encouraged to apply.

POSTDOCTORAL POSITION available to study regulation of signal transduction in neutrophils. Candi-dates should have a Ph.D. with a strong background in molecular biology. Send curriculum vitae and names of three references to: Dr. Kenneth R. McLeish, Depart-ment of Internal Medicine, 615 South Preston Street, University of Louisville, Louisville, KY 40292. (FAX: 502-852-7643). Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION TO STUDY MOLECULAR BIOLOGY OF CELLULAR ONCOGENES AND THEIR INTERACTION WITH ANTI-ONCOGENES

Position available immediately to study transcriptional roles of cellular oncogenes and to decipher the molecular mechanism of their interaction with antioncogenes. Applications are invited from persons with keen interest in this area of research. Current focus in our laboratory includes studies on the involvement of oncogene and antioncogene in cellular transcription, and how they influence cell growth and tumorigenesis (see *Molec. Cell. Biol.* 13:6849–6857, 1993). This challenging opportu-nity exists in a very well-equipped and intense laboratory. Persons with expertise in recombinant DNA technology and protein purification are especially encouraged to and protein purification are especially encouraged to apply with complete curriculum vitae and names of three references to: Swati Palit Deb, Ph.D., Department of Microbiology, The University of Texas Health Sci-ence Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284. The University of Texas Health Science Center at San Antonio is an Early Opportunity Science Center at San Antonio is an Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION available for research on mapping the antigenic and functional domains of human cytomegalovirus glycoproteins. Work includes gene cloning, protein expression in eukaryotic cells, construction of mutant viruses and transformed cell lines. Preference will be given to applicants with a strong background in molecular and cellular biology or virology. Interested candidates should submit curriculum vitae and names of three references to: Dr. Lenore Pereira, School of Dentistry, University of California San Francisco, HSW-604, San Francisco, CA 94143– 0512. Equal Opportunity/Affirmative Action.

POSTDOCTORAL POSITION available to study biophysical and structural properties of lens proteins and the mechanism of cataract formation. Background in protein chemistry, protein-protein or protein-membrane interactions, and biophysical/spectroscopic methods (e.g., CD, fluorescence, FTIR, scanning calorimetry, NMR) preferred. Send curriculum vitae to: Dr. W. K. Surewicz, Mason Institute of Ophthalmology, Uni-versity 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.

POSTDOCTORAL FELLOWSHIPS EVOLUTIONARY MECHANISMS

The University of Oregon (UO) is soliciting applica-tions for postdoctoral (Research Associate) positions to be funded by an NSF training grant on Genetic Mechanisms of Evolution. Highest priority will be given to applicants seeking cross-disciplinary training and exhib-iting a sincere commitment to understanding issues in phenotypic evolution at the molecular, developmental, and the server is a server is used. The server of server phenotypic evolution at the molecular, developmental, and/or population-genetic levels. The six core faculty currently involved in the administration of the training grant are V. Chandler, C. Kimmel, R. Lande, M. Lynch, R. Meeks-Wagner, and F. Stahl, but appointments in other Department of Biology labs are possible, provided the goals of the trainee are compatible with the focus of the grant. Potential candidates are encouraged to consult with UO faculty sponsors prior to submitting an application. Funding is for one year, with a second year of support possible, pending renewal of the grant. Sup-port is only available for U.S. citizens or permanent residents. Applicants should submit a brief summary of interests and curriculum vitae and have three letters of reference forwarded by 1 July 1994, to: Evolutionary Mecha-nisms Training Group, Department of Biology, Uni-versity of Oregon, Eugene, OR 97403-1210. The University of Oregon is an Affirmative Action/Equal Oppor-tunity Institution, committed to cultural diversity and compli-ance with the Americans with Disabilities Act.

SmithKline Beecham Biologicals

SmithKline Beecham Biologicals, Belgium, is a subsidiary of the SmithKline Beecham Group, worldwide leader in the pharmaceuticals industry. Over the last years, SmithKline Beecham Biologicals has become the world largest vaccine producer both in terms of sales and volume, bringing to the market the first recombinant vaccine for human use (Engerix B) and more recently the world first vaccine against Hepatitis A.

The roots of our success lie in an integrated approach to research, development and manufacturing which, we believe, is unique in the industry. Building on our current momentum, we are expanding our Research and Development organisation and have immediate opening for the following positions (m/f):

Preclinical Vaccine Development Director Ref RD1

His/her role will be to bring new vaccine molecules and concepts emerging from our discovery efforts to fruition. Leading a team of experienced scientists, engineers and technicians (in cell biology, fermentation, purification, formulation, immunology), he/she will be responsible for production of clinical materials under GMP, developing reliable processes and assays and ensuring their transfer.

He/she will be a Ph.D. or Engineer in Biological Sciences/Biotechnology with considerable knowledge of Biotechnological processes, regulatory requirements and GLPs/GMPs. As a team player, he/she will work closely with Clinical, Regulatory, Q.C. and Manufacturing departments and play a pivotal role in ensuring an optimal product development scenario.

Outside R&D Manager Ref RD2

Our Research and Development efforts are sustained by a deliberate and aggressive policy of collaborative research agreements and out contracting to third parties. This individual will support R&D Senior Management in defining our long term research strategy. He/she will identify potential collaborators, implement and manage collaborative programs in close collaboration with in house scientists. Ph.D., he/she will have a broad scientific base in biological sciences and an understanding of scientific and technical issues related to vaccine discovery and development. He/she is also willing to travel extensively.

Head of Cellular Immunology R&D Ref RD3

Inducing strong effector cell mediated immune responses is a key aspect of modern vaccine design. In order to build on our expertise and face with an increasing number of candidate vaccines entering clinical testing, we are expanding our cellular immunology expertise.

The candidate will lead the work of the CMI team towards the development and use of appropriate read-outs both in

The candidate will lead the work of the CMI team towards the development and use of appropriate read-outs both in preclinical (rodents and primates) and clinical settings. The candidate should have a Ph.D. in Biological Sciences with several years post doctoral experience and an established track in the field of immunology. He/she should be experienced in designing and conducting cell mediated immunity (CTL and cytokine production) read-outs in animals and preferably in man. In depth knowledge of immunology and particularly of the effector responses involved in host defence mechanisms is a prerequisite.

The candidate should have an experience in managing a research group and in successfully writing/testing independent research grants. He/she should have leadership capacities so as to actively participate and impact ongoing research programs.

Scientist Immunology/Virology R&D Ref RD4 The candidate will lead the work of a research unit within the Immunology/Virology department, aimed at the research and

development of a novel vaccine.

He/she will have a Ph.D. in Biological Sciences/Virology, and a post doctoral experience in Immunology/Virology. Practical experience with classical virology techniques is a prerequisite. Previous experience in immunity to viruses is a plus.

Scientist Immunology/Bacteriology R&D Ref RD5

The candidate will set up and lead the work of a research unit within the Immunology/Biology department, aimed at setting up and using state of the art biological read-outs for antibacterial effector antibody responses (bactericidal, opsonisation, ...). The work will involve both preclinical and clinical sample testing.

He/she will have a Ph.D. in Biological Sciences/Bacteriology and a post doctoral experience in Immunology/Bacteriology. Previous experience in immunity to bacteria is a plus.

He/she will have an in depth knowledge in bacteriology and immunology so as to actively participate and impact on our ongoing research programs, aimed at the development of novel vaccines.

Our research and development projects are managed within multidisciplinary teams. SmithKline Beecham Biologicals facilities are located in pleasant surroundings, 20 km South of Brussels. A new state of the art expansion of our R&D facility is currently at the final planning stage. Located on the same site as our Manufacturing, Quality Control and other facilities, they allow day to day interaction with all partners. In this context the knowledge of French is an asset but not a prerequisite.

All positions carry a competitive salary and comprehensive benefits package, including incentive, with annual performance review, pension and medical plans.

If you are interested in joining our team in one of the positions above, please send your application and c.v. to SmithKline Beecham Biologicals, Human Resources Department, rue de l'Institut 89, B-1330 Rixensart, Belgium. Fax number: 32.2.656 81 48. Please refer to the job code.



Procter&Gamble

Career Opportunities in Japan

The Corporate Research Division of the Procter & Gamble Company has career opportunities for Japanese scientists to work on basic research programs at our new technical center on Rokko Island in Kobe, Japan. Applicants must be fluent in Japanese and must also have a good practical understanding of the English language.

PhD SCIENTISTS

Candidates should have a PhD in protein chemistry, biochemistry, cell biology, molecular biology, or a related discipline. Postdoctoral training in one or more of these areas is desirable. The current research focus of this group is the molecular mechanisms of bone growth. Research in the future could expand into other applications of biotechnology

Procter & Gamble is a world leader in the research, development, manufacture, and marketing of a wide variety of consumer products. Annual worldwide sales exceed \$30 billion, and our annual R&D investment is \$1 billion. P&G offers a competitive salary and topnotch benefits package. For confidential consideration, please send a letter of introduction, resume, and list of publications to:



Applicants in Japan: Dr. H. Kitado

Procter & Gamble Far East Inc. 17 Koyo-cho, Naka 1-chome Higashinada-ku, Kobe 658 Japan Phone (078) 845-6167 FAX (078) 845-6958

Applicants elsewhere: Dr. J. I. Shulman Procter & Gamble R&PD Technical Recruiting Dept. FETC3 P.O. Box 398707 Cincinnati, Ohio 45239-8707

No agency referrals, please. An Equal Opportunity Employer

Stanford Biochemistry Department

Research Associate

Research Associate to work in an exciting, interdisciplinary project at the Stanford Center for DNA Sequence and Technology. The position involves identifying and finding solutions to problems with current sequencing approaches and the development of new technologies and instrumentation for large scale automated DNA sequencing. The Center consists of an interdisciplinary team of 25 scientists and engineers committed to improving efficiency of sequencing and sequence of chromosome IV. Qualifications include: Ph.D. in molecular biology or equivalent laboratory experience. The candidate must have experience in fundamental molecular biology techniques, and general computer skills associated with sequence and the sequencing sequence in the sequence and the sequence of the sequence of the sequence and initiating the sequence of the sequence of the sequence of the sequence of sequencing in the sequence of the sequence and initiating the sequence of the sequence of the sequence of the sequence and the sequence of the sequence of the sequence of the sequence and the sequence of the sequence of the sequence and the sequence of the sequence and the sequence of the sequence and the sequen

experience in fundamental molecular biology techniques, and general computer skills associated with sequence analysis. Must possess a wide range of scientific and technical interests, and the ability to solve scientific and technical problems.

Postdoctoral Position

The Department of Biochemistry is seeking a Postdoctoral Fellow to investigate the use of oligonucleotide arrays and sequencing by hybridization to increase the accuracy of conventional linear sequencing. The project will be carried out as a collaboration between Affymetrics and the Stanford DNA sequencing and Technology Center. The primary work environment will be at Stanford University with Dr. Ronald W. Davis, although the project will also involve close interaction with the scientists and engineers at Affymetrics.

The Center consists of an interdisciplinary team of 25 scientists and engineers committed to improving efficiency of sequencing and sequence analysis. Presently the group is focusing on finishing the sequence of yeast chromosome

V and initiating the sequence of chromosome IV. Qualifications include: The ideal candidate will have a wide ranging interest in biochemistry and the development of technology, and experience in the biochemistry or physical chemistry of nucleic acids. Must work effectively as a team member and enjoy interaction with a diverse group of dedicated scientists and engineers.

Research and Development Engineer II

Ve are seeking an engineer to develop instrumentation for the Stanford Sequencing and Technology Center within We are seeking an engineer to develop instrumentation for the Stanford Sequencing and Technology Center within the Department of Biochemistry. The position involves developing methods and instruments for the automation of large-scale sequencing of DNA. The engineer will be involved in the design specifications of both the hardware and software of the instruments and will work closely with other members of an interdisciplinary group, including molecular biologist and other engineers. The candidate will be expected to take a lead and independent role in instrument specification, design, and implementation. Finally, the candidate will be expected to interact with outside members of the Human Genome Community by attending conference meetings. Qualifications include: BS/MS in Electrical Engineering, Mechanical Engineering, Chemical Engineering, Applied Physics or related field. We are secking an engineer with a broad range of interests and areas of expertise. Knowledge in mechanical design, motion control and robotics, and an understanding of fluidic systems is highly desirable. Proficiency in C and familiarity with the UNIX and Macintosh computer environments is highly desirable. Demonstration of completed projects involving the development of instrumentation is required. A good foundation

Demonstration of completed projects involving the development of instrumentation is required. A good foundation in physics and physical chemistry is desirable. Interest in genetics and molecular biology is highly desirable. Demonstrated ability to work independently and to take initiative is essential.

Must comply with government regulations and university policies and procedures regarding health and safety procedures. Send curriculum vitae and references to: Ronald W. Davis, Ph.D., Stanford Center for DNA Sequence and Technology, Department of Biochemistry, 855 California Avenue, Room 173, Palo Alto, CA 94304.

Postdoctoral Positions in Immunology and Molecular Biology

Postdoctoral positions are available for (a) an immunologist to study cellular immune responses to novel recombinant anticancer vaccines, both in experimental systems and in clinical trials, and (b) a molecular biologist to develop novel recombinant im-munoglobulin forms and novel recombinant vaccines. Two to three years relevant previous postdoctoral experience desired. Salary range is from \$28,000 to \$40,000 commensurate with experience desired.

To apply, please send curriculum vitae and reference letters to:

Dr. leffrev Schlom, NIH/NCI, Laboratory of Tumor Im-munology and Biology, Bldg. 10, Rm 8B07, 9000 Rockville Pike, Bethesda, MD, 20892.

Telephone: 301-496-4343 FAX: 301-496-2756.

NIH/NCI is an Equal Opportunity Employer

TWO POSTDOCTORAL **RESEARCH POSITIONS** UNIVERSITY OF ARIZONA DEPARTMENT OF ASTRONOMY CENTER FOR ASTRONOMICAL ADAP-TIVE OPTICS

Applications are invited for two research associate positions with the Center for Astronomical Adaptive Optics. The Center is developing techniques to correct Optics. The Center is developing techniques to correct in real-time atmospheric distortion of astronomical im-ages from large telescopes, with particular emphasis on the use of sodium laser guide stars. The program of the newly-established Center is based around the Multiple Mirror Telescope and the Steward Observatory 2.3 m telescope. The MMT currently has an array of six 1.8 m mirrors, but these will be replaced with a single 6.5 m mirror in 1006. A proverful datugation on the system is mirror in 1996. A powerful adaptive optics system is being designed and built whose goal is to achieve the diffraction limit of the 6.5 m aperture at 1.6 and 2.2 microns, on a routine basis.

One position is for an astronomer/physicist with experience in the designing and construction of novel instrumentation. Instrumental projects include optimized wavefront sensors, CW dye lasers with high conversion efficiency, adaptive optics systems analysis, and cam-eras incorporating 1024x1024 infrared arrays. A Ph.D. in astronomy or a closely related field is required. Computer skills are essential; knowledge of C, and the Unix operating system is required and experience in real-time control highly desirable.

The Center also seeks an astronomer to concentrate on scientific observations with adaptive optics in the wavelength range from 1 to 2.5 microns. Preference will be given to the candidate who brings expertise in areas of extragalactic astronomy to complement current research on the solar system, stellar companions and the galactic center.

Both positions are funded for two years at a salary beginning at \$34,000, with a possible third year avail-able. Interested applicants should send curriculum vitae and names and addresses of three referees to Dr. Roger Angel at Steward Observatory, University of Arizona, Tucson, Arizona 85721, (602) 621-1539, fax (602) 621-1532. Application review will begin June 30, 1994. The University of Arizona specifically encourages applica-tions from women and minorities. AA/EEO/ADA.

PROTEIN CRYSTALLOGRAPHER

A Ph.D. level position is available in the Protein Crystallography and Biophysical Chemistry Group at The DuPont Merck Pharmaceutical Company. The successful candidate will have the opportunity to work closely with synthetic chemists, protein crystallographers, modelers and other members of drug discovery teams. The successful candidate should have a strong background in protein crystallography as well as an interest in enzyme mechanisms, protein-ligand interactions, and macromolecular receptors.

pharmaceutical company of the 21st century. DuPont Merck is driven by creative and innovative science and technologies to meet society's healthcare needs through the discovery and development of novel pharmaceuticals.

Our location, near Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The DuPont Merck Pharmaceutical Company can offer you an excellent compensation and benefits package. To be considered, please forward curriculum vitae and names of three references to: Dr. Patricia C. Weber, The DuPont Merck Pharmaceutical Company, P.O. Box 80228, Wilmington, DE 19880-0228. An equal opportunity employer M/F/D/V.

The DuPont Merck Pharmaceutical Company is a partnership between its parent companies, E.I. DuPont de Nemours & Co., and Merck & Co., Inc. We are creating a multinational, multibillion dollar, research-based

The DuPont Merck Pharmaceutical Company Merging Strengths...Emerging Opportunities.

National Center for Biotechnology Information National Library of Medicine National Institutes of Health Public Health Service

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Senior Scientist

The successful applicant should have a strong background in Molecular Biology and Molecular Microbiology as well as extensive experience in computer-assisted sequence analysis and studies in molecular evolution and taxonomy, particularly of viruses and procaryotes. Strong publication record is a requirement.

For more information contact Ms. Rita Sweeney at (301) 496-4943. Candidates should send a current curriculum vitae and bibliography to:

Ms. Rita Sweeney NLM/Office of Personnel Management Building 38, Room 2N05 8600 Rockville Pike Bethesda, Maryland 20894

Applications must be postmarked no later than June 15, 1994

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, sexual orientation, or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer

DEPARTMENT OF THE ARMY SENIOR EXECUTIVE SERVICE VACANCY

DIRECTOR, CHEMICAL & BIOLOGICAL SCIENCES DIVISION U.S. Army Research Office

Research Triangle Park, North Carolina

Applications are being accepted for the Director, Chemical and Biological Sciences Division, a career Senior Executive Service (SES) position reporting to the Director, Army Research Office. The annual salary range is \$95,771 - \$119,275 depending upon individual qualifications and salary history. The individual selected will also be eligible to earn performance-related bonuses and awards.

The incumbent serves as the Army's key executive for the conduct of extramural research in the fields of chemical and biological sciences. Formulates, directs, administers, and has overall scientific responsibility for a research program of national and international significance which takes into account current Department of the Army technology deficiencies, Mission Area deficiencies and future requirements of the 21st Century Army. Has responsibility for the efficient management of an annual budget of approximately \$20M derived from Army sources and other agencies and exercises technical direction over a subordinate staff of eight civilian employees including six high level scientists and two support personnel. Serves as the primary scientific spokesperson for the Army Research Office in the chemical and biological sciences and interacts with all levels of governmental and academia management, with a variety of experts in the field and with representatives of the foreign scientific community.

Applicants must possess knowledge, skills and abilities in the mandatory executive core qualifications of strategic vision, human resources management, program development and evaluation, resources planning and management, and organizational representation and liaison. In addition, applicants must have knowledge of state-of-the-art developments in chemistry and the ability to evaluate the quality of research in this field.

Applicants must be U.S. citizens, be able to obtain a secret clearance, be geographically mobile, and be willing to join the Army Acquisition Corps.

Interested individuals may obtain a complete application package by calling Ms. Tammy Higgins, (703) 274-9415 or by writing to: Commander, U.S. Army Materiel Command, ATTN: AMCPE-CS, 5001 Eisenhower Ave, Alexandria, VA 22333-0001. Applications must be postmarked no later than June 27, 1994.

THE DEPARTMENT OF THE ARMY IS AN EQUAL OPPORTUNITY EMPLOYER



Twenty Years of Neuroscience and Discovery

June 26-27, 1994

Grand Hyatt, Washington, DC

This conference, a satellite of the XIXth Collegium Internationale Neuro-Psychopharmacolgicum Congress is jointly sponsored by NIDA and NFBR and will highlight 20 years of NIDA sponsored research in neuroanatomy, neurochemistry, neurobiology, psychobiology, and molecular biology of drug abuse. The conference will also focus on the future of neuroscience research aimed at understanding drug abuse and addiction.

Sponsored By:

National Institute on Drug Abuse National Institutes of Health and National Foundation for Brain Research



For a registration brochure, contact the National Foundation for Brain Research 1250 24th Street, Suite 300, Washington, DC 20037 Phone: 202/293-5453 Fax: 202/466-2888

U.S.-ISRAEL SCIENCE FOUNDATION EXECUTIVE DIRECTOR

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

This 1972 agreement signed by the two Governments and the Board regulations state: $\label{eq:generalized_state}$

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

The candidate for Executive Director must be well acquainted with the Israeli and U.S. academic research systems, and the usual proposal review procedures.

Curriculum vitae and letters of interest should be submitted by July 15 in the following manner:

- U.S. applicants should send their material to Dr. Claude Lenfant, Director National Heart, Lung, and Blood Institute National Institutes of Health Bethesda, Maryland 20892 U.S.A.
- Israeli applicants should send their material to Mr. Amnon Einav, Chief Scientist Ministry of Energy and Infrastructure 234 Jaffa Road Jerusalem, ISRAEL

Applicants should be able to assume BSF responsibilities as soon as possible, but no later than January 1, 1995.

Genes & Behavior

A SCIENCE Special Issue 17 June 1994

What is the relationship between genetics and behavior? Scientists in many biological and social disciplines continue to intensively research and debate the subject of genetics and behavior. Now SCIENCE takes an in-depth look at this intriguing topic in the 17 June issue.

The issue features a series of scientific articles and perspectives written by key experts in the field who provide readers with more detailed accounts of research in progress. Neither readers nor recruiters will want to miss this blockbuster issue. Book your recruitment ad space today!

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The Cardiovascular Diseases unit of our Preclinical Research Department a strong commitment to research on the involvement of platelets in thrombosis.

We have an excellent opportunity for a

Biochemist/Cell Biologist

to join a dynamic group working on the discovery and characterization of new antithrombotic drugs. We are looking for someone who enjoys working in a multidisciplinary team and has the ability to develop his/her own research interests.

Applicants should have

–a Ph.D. and extensive research experience in the field of adhesion receptors, preferentially integrins

 successfully completed at least one postdoctoral fellowship in this research area

-a strong publication record in the field of receptor research

In addition to offering a dynamic international research environment, the department encourages collaboration with outstanding academic groups and publication of findings in scientific journals.

If you are interested in this position, please send your handwritten letter of application, references, publication list and curriculum vitae to Mrs. M. Waespe of our Personnel Department, quoting reference Science 62/94/ Wae.

F. Hoffman-La Roche Ltd, P.O. Box Ch-4002 Basel

REVISED ADVERTISEMENT UNIVERSITY OF MINNESOTA CANCER CENTER DIRECTOR

The University of Minnesota invites applications or nominations for the position of tenured Professor/Associate Professor and Cancer Center Director. The Director of the Cancer Center must have an established national or international reputation of excellence in interdisciplinary oncology research. This individual will also have the demonstrated experience and organizational skills necessary to fulfill the Center's mission of initiating, participating in, supporting and evaluating multidisciplinary basic and clinical cancer research, education and treatment. Essential academic preparation and experience include an M.D. degree and a strong oncology research record as evidenced by publications and grants. The qualifications for the rank of Professor with tenure must include national distinction in the field and demonstrated leadership in administration, research, and teaching. The qualifications for the rank of Associate Professor with tenure must include professional distinction in research and writing and demonstrated effectiveness in teaching and advising. Faculty appointment will be in the appropriate Medical School department.

Responsibilities include: management of the Center budget which facilitates operations, academic appointments, and delineates clinical, research and educational activities; use of Cancer Center facilities, including laboratory and office space within the Masonic Cancer Research Building; approval of all membership appointments for the Cancer Center; serve as liaison to the National Cancer Institute, other national and regional cancer organizations, academic centers and health care organizations; maintain an academic and, as appropriate, a UMHC staff appointment and undertake research activities consistent with the direction of the Center's research; and participation in Cancer Center development efforts.

The Director reports to the Dean of the Medical School and confers with the Cancer Center Advisory Committee. Additionally, the Director interacts with the President of the University of Minnesota Health System regarding clinical affairs in cancer.

The deadline for receipt of applications/nominations is June 24, 1994. Starting date is negotiable. Interested applicants should send a copy of their curriculum vitae to:

Dr. Seymour H. Levitt Chair, Cancer Center Search Committee University of Minnesota Medical School Box 293 UMHC; c/o S. Jackson 420 Delaware Street S.E. Minneapolis, Minnesota 55455-0392

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

National Cancer Institute • National Institutes of Health Public Health Service

Cancer Prevention Fellowship Program

The Division of Cancer Prevention and Control (DCPC), NCI, is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to train individuals from a multiplicity of health science disciplines in the field of cancer prevention and control. The program provides for: Master of Public Heath training (at accredited university programs); Participation in the DCPC Cancer Prevention and Control Academic Summer Course (open to all physicians and scientists interested in learning the principles and practice of cancer prevention and control); Working at DCPC directly with individual preceptors on cancer prevention and control projects; Brief field assignments in cancer prevention and control programs at other institutions. Funding permitting, as many as ten Fellows will be accepted for up to three years of training, beginning July 1, 1995. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

Eligibility

M.D., D.D.S., or D.O. from a U.S., territorial, or Canadian Medical School. Foreign medical graduates must have current ECFMG/FMGEMS or USMLE certification and appropriate experience, e.g., one year residency in a training program approved by the Accreditation Council for Graduate Medical Education.

Or

Ph.D., Dr.P.H. or other doctoral degree in a related discipline (epidemiology, biostatistics, and the biomedical, nutritional, public health or behavioral sciences). Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.

Plus

U.S. citizenship or resident alien eligible for citizenship within four years.

For details and an application catalog either call, fax or send a postcard or letter with your name and home address to:

Douglas L. Weed, M.D., M.P.H., Ph.D. Director

Cancer Prevention Fellowship Program Division of Cancer Prevention and Control National Cancer Institute

Executive Plaza South, T-41 Bethesda, MD 20892

Further Inquiries: Mrs. Barbara Redding TELEPHONE(301) 496-8640 FAX(301) 402-4863

Deadline for receipt of applications: September 1, 1994



NIH is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Position open immediately to participate in research on glycoprotein biosynthesis and metabolism in the on glycoprotein biosynthesis and metabolism in the retina, and on control mechanisms of the dolichol path-way. A strong background in molecular biology and biochemistry is required. Send curriculum vitae and names and addresses of three references to: Dr. Edward L. Kean, Department of Ophthalmology, Room 653 Wearn Building, Case Western Reserve University, Cleveland, OH 44106. An Equal Opportunity/Affirma-tive Action Employer.

POSTDOCTORAL POSITIONS for work on ag-ing and signal transduction in T lymphocytes, emphasizing and signal transduction in T lymphocytes, emphasiz-ing calcium regulation and protein kinase pathways. A strong background in cell biology and/or molecular immunology is required. Send curriculum vitae, brief statement of research interests, and names and telephone numbers of three references to: Richard Miller, Univer-sity of Michigan, Box 2007, 300 North Ingalls Street, Ann Arbor, MI 48109. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP—NEURO-CHEMISTRY/MOLECULAR BIOLOGY. NIH R01-funded position, 2 years, \$25,000 stipend. Fellow will perform molecular cloning of neurotransmitter re-ceptors and ion channels in the auditory/vestibular periphery. Molecular biology training required. Interest in HPLC analysis of novel neurotransmitters helpful. Send HPLC analysis of novel neurotransmitters helpful. Send curriculum vitae, previous publications, and names of three references to: Dennis Drescher, Ph.D., Labora-tory of Bio-otology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201. Wayne State University is an Equal Opportunity/ Affirmative Action Employer.

UNIVERSITY OF OXFORD Department of Biochemistry in collaboration with the NERC Institute of Virology and Environmental Microbiology

Invite applications for two POSTDOCTORAL RE-SEARCH ASSOCIATE 1A positions to start on 1 July SEARCH ASSOCIATE 1A positions to start on 1 July 1994. The positions are for two years in the first instance and are funded by a 5-year programme grant from the AFRC (BBSRC) to study the morphogenesis of blue-tongue and related orbivurses. The work will involve the site-specific mutagenesis, RNA transcription/replication and RNA packaging in viral capsids, etc. A third Re-search Associate 1A position to start on 1 August 1994 is for 3 years. The position is funded by the MRC to study the role of protein interactions in the formation of study the role of protein interactions in the formation of study the role of protein interactions in the formation of complex virus particles. All applicants must have a strong background in molecular biology and preferably a good understanding of RNA processing (e.g., splicing, edit-ing, etc.) and recombinant DNA technology. Some knowledge of virology would also be desirable. Salaries are negotiable depending on experience. Applicants should FAX or send full curriculum vitae and the names and addresses of two referees to the: Administration Officer, Institute of Virology, Mans-field Road, Oxford OX1 3SR, UK; FAX: +44 865 59962. Closing date for applications: 24 June 1994. Applicants should note that the Institute operates as a non-smoking environment.

smoking environment.

onment. The University of Oxford is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION IN MOLECULAR NEUROBIOLOGY YALE UNIVERSITY

Two positions are available immediately to study modulation of calcium channel function by neurotransmitter/G-protein, molecular mechanisms of excitation-contraction and excitation-secretion coupling using recombinant expression, mutagenesis, biochemistry, cell biology and electrophysiology methods. Candidates should have a Ph.D. or M.D. and training in electrophyscell

iology or molecular biology. Please send curriculum vitae, names of two references, statement of your research experience and interest to: Dr. Tsutomu Tanabe, Department of Cellular and Molec-ular Physiology, Yale University School of Medicine, BCMM 254D, P.O. Box 9812, New Haven, CT 06536–0812. Telephone: (203) 737-4427. FAX: (203) 787-5334.

An Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE-FISHERIES. The Cooperative Unit of Fisheries Education and Research, a joint activity of the University of Miami and the search, a joint activity of the University of Miami and the National Marine Fisheries Service, seeks applicants for a postdoctoral position in population dynamics. QUALI-FICATIONS: A strong background in fishery popula-tion dynamics and in one of: mathematical modeling, statistical data analysis or survey design. One-year ap-pointment starting fall 1994, with possibility of exten-sion. Salary: \$30,000 to \$34,000. Apply by 1 August 1994 with curriculum vitae, statement of research inter-sets and there letters of excommendation to: Dr. Victor ests and three letters of recommendation to: Dr. Victor R. Restrepo, CUFER, 4600 Rickenbacker Causeway, Miami, FL 33149. Telephone: (305) 361-4022, FAX: (305) 361-4457, Internet: cufer@rsmas.miami.edu. An Equal Opportunity/Affirmative Action Employer and a smoke/drug-free workplace.

RESEARCH ASSOCIATE

Postdoctoral or with some postdoctoral experience. To join an active group studying the biochemistry of the fibrinolytic system and participate in a project on the involvement of platelets. Requires strength in protein chemistry and protein purification; experience with plate-lets and/or membrane proteins highly desirable. Two-year position available immediately. Send curriculum vitae and names of three references to: Ralph Pannell. Ph.D., Vascular Research Laboratory (Burlington Building), Deaconess Hospital, 185 Pilgrim Road, Boston, MA 02215. (Harvard Medical School affiliate.)

RESEARCH SPECIALIST—The Genetics and Biotechnology Section of Westvaco Forest Research has an immediate opening for a research specialist in its forest tree genetic transformation program. This position will involve laboratory research on genetic transformation of southern pine species and possibly hardwood species. Responsibilities include assisting in all phases of genetic transformation research, installation and maintenance of transformation research, installation and maintenance or experiments, detailed record keeping, maintenance of laboratory equipment, and general laboratory manage-ment. Applicants should possess a B.S. or M.S. degree in the Plant Sciences with an outstanding record of academic achievement. Prior research experience in plant cell and tissue culture is mandatory. Applicants with experience in plant genetic transformation are especially encouraged to apply. For consideration send résumé, college transcripts and three letters of recommendation by June 24, 1994, to: Mr. Ted Bush, Personnel Superintendent, Westvaco Corporation, P.O. Box 1950, Summerville, SC 29484. This announcement is separate from a similar announcement posted March 10, 1994. An Equal Opportunity Employer, m/f.

POSTDOCTORAL RESEARCH ASSOCIATE

Will conduct research and study on the biochemistry of polydnavirus gene expression and encoded protein structure and function. Studies the molecular biology of polydnavirus gene expression pursuant to determining the mechanism of viral interference with host immune the mechanism of viral interference with host immune recognition of foreign agents. Successful applicant will apply all aspects of recombinant DNA and viral vector cloning to study the expression of a family of viral genes encoding proteins with unique structural motifs. Starting at \$25,000, negotiable commensurate with experience. Please send résumé and three references to: Dr. Max Summers, Center for Advanced Invertebrate Molec-ular Sciences, Texas A&M University, Department of Entomology, College Station, TX 77843–2475. Tex-as A&M University is an Affirmative Action/Equal Opportunity Employer.

SCIENTIST/PHYSICIAN/EDUCATOR

Noncommercial biomedical corporation near San Francisco needs full-time employee to develop and present seminars. Audience: health professionals

Employer wants seminars on: nutrition; women's health issues; pharmacology; brain science; genetics;

dermatology; and mental health. Applicant must have doctoral degree in an appropriate scientific discipline, publications, clinical experience, and

excellent speaking skills. Salary range: \$35,000 to \$100,000 per year. Applicant must be willing to travel in the United States and lecture two to three times a week.

Please submit cover letter, résumé, and list of suitable lecture topics. Apply to: Biomed International, 5801 Christie Avenue, Suite 400, Emeryville, CA 94608.

POSITIONS OPEN

ThromboSys, Inc., a biotechnology company, seeks qualified scientists for basic and applied research in the field of vascular disease to be conducted in an academic research setting in the Milwaukee, Wisconsin, area. Can-didates should hold either an M.D. or Ph.D. degree and a background in cellular and molecular biology and/or rotein chemistry. A minimum of 2 years of postdoctoral training required. Applicants should send résumés to: ThromboSys, Inc., c/o Philadelphia Ventures, The Bellevue, 200 South Broad Street, Philadelphia, PA 19102.

UNIVERSITY OF PENNSYLVANIA

Available immediately for studies on anesthetic mod-ulation of vascular cell function. Mechanisms being examined include signal transduction and mediator pro-duction in cultured vascular cells, and microvascular and regional hemodynamics in intact animals. Applicants should have a Ph.D. in biological/life science. Experience in intact animal models to study cardiovascular function in intact animal models to study cardiovascular function and microcirculatory dynamics and tissue culture pre-ferred. Applicants should send curriculum vitae and names of three references to: Dr. Alex Loev, Depart-ment of Anesthesia, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104–4283. E-mail to: loeb@A.1.mscf.upenn.edu.

POSTDOCTORAL RESEARCH ASSOCIATE

A postdoctoral position is available to study cytoplas-mic RNA processing as it relates to translational control in early *Xenopus* and mouse development. One useful reference is *Genes & Dev.* 6:2580 (1992). Those interested who have experience in developmental biology or molecular biology should send complete curriculum vitae together with names, addresses and telephone numbers of three persons who may act as references to: Dr. Joel Richter, c/o Human Resources, Worcester Founda-tion for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545, USA. An Equal Opportunity/ Affirmative Action Employer, M/F/D/V.

PRINCIPAL INVESTIGATOR

The Guthrie Research Institute (GRI) is recruiting a scientist to establish a research program in cell signaling mechanisms. GRI offers an attractive start-up package, excellent facilities, competitive salary, and continued endowment-based support to an investigator interested endowment-based support to an investigator interested in working in a productive, lively and collegial research environment. GRI is part of the Guthrie Healthcare System, an active clinical, teaching and research center serving the twin tier regions of Pennsylvania and New York. Existing laboratories are involved in the study of receptor expression and signal transduction, cell cycle regulation, adhesion molecule function and gene regula-tion, and HIV entry/fusion mechanisms. Please send curriculum vitae, summary of research contexts, and the names of three references to: Chair Search Committee names of three references to: Chair, Search Committee, Guthrie Research Institute, Guthrie Square, Sayre, PA 18840–1692. GRI is an Equal Opportunity/Affirmative Action Employer.

VISITING SCIENTIST SEILER RESEARCH LAB U.S. AIR FORCE ACADEMY

POSITION: Visiting Scientist to study ultra-short laser pulse effects on cultured retinal pigment epithelium (RPE) cells and other pigmented cell lines. Seiler Re-search Lab is a component of the Air Force Material Command research lab system with a broad research focus and well-equipped laboratories co-located with the USAF Academy, a four-year undergraduate institution. Initial employment for one year with possible option for a second year, pending final government funding decisions

QUALIFICATIONS: Strong academic and publica-tion record, molecular biology (mRNA isolations, gene expression) and general tissue culture experience required, experience with pigmented human cells highly desired, protein characterizations/ID by 2D gel electro-phoresis and fluorescent/confocal microscopy experience desired. Must be currently employed by university with

desire to enter ongoing project. **TO APPLY**: Send curriculum vitae, publication and presentation list, 2 to 3 page proposal of desired areas of study to: Lt. Col. Henry S. Tillinghast, Frank J. Seiler Research Lab/NP, USAF Aacademy, CO 80840. Ap-plications must be postmarked by July 1, 1994.

SR. RESEARCH ASSOCIATE-HEMOSTASIS R & D

B axter Diagnostics Inc. is a world leader in supplying diagnostic products and instrumentation to clinical laboratories. We're currently seeking a talented and experienced individual at our Miami facility.

Working within the Hemostasis Department of our Research and Development division, you'll design and execute experiments with coagulation fibrinolysis proteins. You'll also be responsible for development of in-vitro assays to determine the concentration and function of coagulation and fibrinolysis factors.

We require an MS (Ph.D. preferred) in Biochemistry, Biology, or Organic Chemistry, 5 years of academic or industrial experience; knowledge of protein chemistry/biochemistry; and knowledge of protein structure and function relationship. We also require experiment design experience, knowledge of plasma protein purification and analytical methods, and strong communication skills.

We offer a competitive salary and benefits package in an excellent scientific environment. For consideration, please send a resume with salary requirements to: **Baxter Diagnostics Inc.**, **Human Resources**, **E348-PELZ**, **1851 Delaware Pkwy.**, **Miami**, FL **33125**. Equal Opportunity Employer. We conduct pre-employment drug testing.

Baxter Diagnostics Inc.



RESEARCH OPPORTUNITY IN ANALYTICAL BIOCHEMISTRY

The Analytical Biochemistry Department is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment.

RESEARCH MANAGER/PROTEIN ANALYSIS (JOB #1380-C) - The primary responsibility of this individual will be the validation and scale-up of protein assays (particularly immunoassays) for the analysis of transgenic plants. Plant sample preparation, assay problem solving and technology development skills may also be required for assigned projects. The successful candidate will be interacting with the assay development and application groups and is expected to design, implement and interpret experiments. EDUCATION/EXPERI-ENCE: Ph.D. or equivalent experience in molecular biology, biochemistry or microbiology plus two years directly related lab experience is required. Experience in protein analysis, biochemistry (including immunoassays) is required and experience with statistical analysis, GLP and transgenic plant analysis is important.

Applications received by June 24, 1994 will be assured of consideration. However, applications will be considered until the position is filled.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity Employer. Please send TWO complete sets of resume/application information. Indicate in your correspondence the JOB #, and the names, addresses and telephone numbers of three references to:



PIONEER HI-BRED INTERNATIONAL, INC. Analytical Biochemistry Department Attn: Dawn M. Meyer, JOB #1380-C 7300 NW 62nd Avenue, P.O. Box 1004 Johnston, IA 50131-1004

NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES

The National Institutes of Health (NIH) invites applications for the position of Deputy Director for Intramural Research, 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 pay level per annum (currently \$92,900 to \$115,700) plus 4.23 per cent locality pay. The person selected may be eligible for a Physicians Comparability Allowance ranging from \$5,000 to \$20,000 per year. A 1 year probationary period must be served by the individual selected if not currently in the career SES.

The position of Deputy Director for Intramural Research (DDIR) serves as the principal assistant and advisor to the Director, NIH, on all matters relating to the substance, quality and effectiveness of NIH science and intramural research policies. The incumbent is responsible for overall planning for intramural research at the NIH; administers, manages and oversees the scientific program and identifies major areas of research interest by remaining constantly aware of trends and developments in biomedical research and training, both within this country and abroad. The DDIR serves as a liaison on intramural research programs with the media, special interest groups, high-ranking scientific and executive officials throughout DHHS, PHS and other Federal agencies, academic and private organizations and with members and staff of Congress. The incumbent must be cognizant of legislative processes and issues as they affect the intramural programs to defend these programs before congressional committees. The incumbent must be familiar with and support the various NIH, DHHS and Federal standards of conduct to review certain requests for approval of outside activities and financial disclosure reports.

Applicants must possess knowledge and biomedical research experience in one of the following: Biology, Chemistry, Medicine, Microbiology or Pharmacology. *Desirable factors which should be addressed:* (1) Applicants should demonstrate substantive knowledge in the biomedical research field by evidence of professional recognition and experience; (2) Applicants should demonstrate the ability to direct and manage a biomedical research organization; (3) Applicants will be evaluated on type and extent of training and education; and (4) Applicants will be evaluated on honors and awards received.

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. Additionally, applicants may send a curriculum vitae and a bibliography. The vacancy announcement (OD-94-1048) with mandatory/desirable qualifications requirements can be obtained by calling (301) 402-4111. Application material must be sent to the following address:

National Institutes of Health Office of the Director Personnel Office 9000 Rockville Pike, Bldg. 31, Room 1C27 Bethesda, Maryland 20892

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. APPLICATIONS MUST BE POSTMARKED NO LATER THAN 06-29-94.

SELECTION FOR THIS POSITION WILL BE BASED SOLELY ON MERIT, WITH NO DISCRIMINATION FOR NONMERIT REASONS SUCH AS RACE, COLOR, RELIGION, GENDER, NATIONAL ORIGIN, POLITICAL AFFILIATION, MARITAL STATUS, DISABILITY, AGE, SEXUAL ORIENTATION OR MEMBERSHIP OR NONMEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

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Program Director Industry, Telecommunications, and Commerce

The Office of Technology Assessment, a science and technology policy supportagency of the U.S. Congress, has opened a search to fill the position of Program Director for the Agency's Industry, Telecommunications, and Commerce Program (ITC) to be created in the fall of 1994. The ITC Program will assume many of the responsibilities of the current agency programs in Telecommunications and Computing Technologies and in Industry, Technology and Employment. The Program Director is a member of OTA's senior management, responsible for developing both staff and policy directions for studies on technology and international industry competitiveness, telecommunications and computing technologies, the national information infrastructure, international trade, industry productivity, and related topics. All studies will reflect the Agency's statutory mission, which is to analyze the implications of the application of technology, at the request of Committees of the Congress.

The ITC Program Director will be one of the Agency's six program directors, and will report directly to the Assistant Director for Industry, Commerce, and International Security. The position responsibilities include management of approximately 30 highly-skilled policy researchers, which will require a strong ability to lead, build, support, and direct staff as well as proven ability to exercise quality control in research, critical analysis, synthesis, and delivery of polished final products for delivery to the Congress and the public. Experience in public policy and acquaintance with the legislative environment are also essential.

Applicants must have an advanced degree or equivalent experience in a relevant technical or policy area, research and management experience in a relevant field, good interpersonal skills, no pre-determined legislative or policy agenda, and a high energy level. Submit curriculum vitae, list of references, and a letter indicating strengths by July 15, 1994 to:

Mr. William J. Norris ITC Program Director Position Office of Technology Assessment United States Congress Washington, D.C. 20510-8025 FAX: 202-228-6098 INTERNET: WNORRIS@OTA.GOV

Equal Opportunity Employer

Post-Doctoral Positions in Biosensors Sandia National Laboratories California

Sandia National Laboratories in Livermore, California is pursuing biosensor applications in a variety of areas such as medical diagnostics, environmental monitoring, and national defense. We are currently assembling teams of scientists and engineers to develop biosensor technologies, and are searching for qualified post-doctoral candidates who would be interested in working in a broadly interdisciplinary environment and participating in interactions with a variety of departments and university collaborators. Successful candidates should have a Ph.D. and demonstrated research ability in an area related to biosensor development. Research areas of interest include, but are not limited to, enzyme-based and immuno/affinity-based biosensors and assay systems, fiber-optic biosensor design, bioelectronic sensor devices, and surface attach ment methodologies for enzymes or antibodies. Salary and fringe benefits are extremely competitive. Candidates should send a CV, names of references, uncertified copies of transcripts, and reprints to:

Dr. Joseph Schoeniger c/o A.M. Isham, Personnel, 8522-S52 Sandia National Laboratories P.O. Box 969 Livermore, CA 94551-0969

Deadline is August 1, 1994 U.S. Citizenship required. Equal Opportunity Employer M/F/V/D



NMR SPECTROSCOPIST

Owens-Coming seeks an experienced NMR Spectroscopist to work in our Analytical Services R&D Laboratory at the Company's primary Science and Technology Center located in central Ohio. A \$3 billion, global corporation, Owens-Coming manufactures glass fibers and related materials for use in both construction and composites applications. The essential function of this position will involve analysis work across all of our divisions and product lines. Light travel to our manufacturing operations or other external suppliers may be involved.

The successful candidate must possess a strong background in NMR coupled with either an M.S. with five years of hands-on experience or a PhD in Organic or Analytical Chemistry. Prior work in a customer support environment plus demonstrated experience with other analytical techniques (GC, HPLC, MS or FTIR) desired. Working in a team environment, the incumbent will report directly to an R&D Manager and must have solid interpersonal skills as required to interface with internal and external customers.

For immediate consideration, please forward resume with salary history in confidence to:



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Massachusetts General Hospital Clinical Immunology Supervisor

> This professional will supervise our Clinical Immunology Laboratory which performs a broad spectrum of tests using nephelometry, ELISA, immunofluorescence, RIA, and fluorescence polarization immunoassay. In addition to overseeing its daily operation, you will hold performance reviews and teach staff. A Ph.D. in Immunology is preferred.

> Please send resumes to: Massachusetts General Hospital, Employment, Mail Code MO1518, 101 Merrimac Street, Boston, MA 02114. Fax: (617) 724-2266. Proudly pursuing equal opportunity and affirmative action.

For the Goxel of Mind, Boxly and *Spirit!* THE MGH HEALTH AFFILIATES THE OHIO STATE UNIVERSITY Poultry Molecular Biologist

The Poultry Science Department invites applications for an entry level tenure-track faculty position in Poultry Molecular Biology at the Assistant Professor level. Location: Ohio Agricultural Research and Development Center, Wooster, Ohio. Date Available: July 1, 1994. Application Deadline: May 15, 1994 or until position is filled. Salary Range: Negotiable, commensurate with experience. BENEFITS: Excellent fringe benefits and professional development opportunities.

Responsibilities of Position: This position is 80% research and 20% teaching. Conduct research in molecular biology of genes of poultry species. Major emphasis should include characterization and regulation of genes critical to growth and development or reproduction. The candidate must establish and lead a quality research program. The candidate is also expected to contribute to an interdisciplinary team focusing on the genetic, physiological and nutritional basis of growth and development, reproduction, or disease resistance. Instructional and educational responsibilities include teaching a molecular biology techniques course, training graduate students and postdoctoral scientists in molecular sciences, and contributing expertise to other classroom instruction at The Ohio State University. An interest in working with poultry species is necessary.

Qualifications: Ph.D. with demonstrated expertise in molecular biology. Experience or background in poultry and animal sciences desired. Candidate must have an interest in participating in interdisciplinary research programs. Must demonstrate research excellence with quality publications. Postdoctoral experience desirable. Interested Persons Should Apply To: Dr. Forest Muir, Department of Poultry Science, 674 W. Lane Avenue, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/ Affirmative Action Employer. Women, Minorities, Vietnam-Era Veterans, Disabled Veterans and Individuals with Disabilities are Encouraged to Apply.

POSITIONS OPEN

RESEARCH CHEMIST. 37.5 hours per week. \$17 per hour. Responsible for design, performance, and analysis of spectroscopic and electrochemical experiments on photosensitive proteins and other biomolecules in native and artificial membrane environments. Ph.D. in Chemistry (emphasis in physical chemistry). Strong background in optical and vibrational spectroscopy, photochemical kinetics, interfacial and surface electrochemistry, dielectric measurements and time-resolved spectroscopy. Expertise in physical chemistry of model lipid membranes and in theoretical calculations of biomembrane surface electrostatics. Job site and interview: Santa Cruz, California. Send ad and résumé or letter of quali-fication to: Job Order Number CM 35071, P.O. Box 269065, Sacramento, CA 95826–9065.

SCIENCE WRITER/EDITOR (Senior Level)

The University of Texas Medical Branch at Galveston (UTMB) is seeking an experienced science writer to research and write news and feature stories covering a broad range of clinical and basic medical sciences. This position also acts as the University's chief media contact on science-related matters and chief science writer/editor for the University's biannual science magazine and monthly research newsletter. Minimum requirements include a Bachelor's degree, 5 years of professional writing and editing experience and thorough back-ground in medical sciences. Journalistic experience pre-ferred. Prior experience in an academic health science center is highly desired. Qualified candidates should send a detailed résumé with salary requirements and published writing samples to: Office of University Relations, 301 University Boulevard, Galveston, TX 77555-0104.

STAFF SCIENTIST, For Manufacturer in the Cincinnati Area

Development of dosage forms and drug delivery systems for new and existing therapeutic agents. Conduct preformulation physical and chemical characterizations of new therapeutic agents and preclinical characterization of the pharmacokinetic behavior of new and existing agents using animal models. Employ preformulation, agents using animal models. Employ preformulation, pharmacokinetic, and pharmacodynamic data to design appropriate dosage forms, conventional and sustained release, and drug delivery systems for human use using biopharmaceutical principles. Conduct *in vitro* and *in vivo* evaluations of dosage forms. Evaluate clinical phar-macokinetic data. Ph.D. in Biomedical Science or Phar-maceutics required plus one very of expressions. maceutics required plus one year of experience in the job offered or one year of experience in pre- or postdoctoral research in biopharmaceutics and pharmacokinetics in cluding developing solid and liquid dosage forms for new and existing therapeutic agents involving *in vitro* and *in vivo* evaluation of dosage forms, drug preformulation and pharmaceutics description primed pharma and physico-chemical characterizations, animal pharma-codynamic studies involving efficacy measurements, and evaluation of human clinical and animal pharmacokinetic

data to evaluate dosage forms. Forty hours per week, 8:30 to 4:30. Salary \$57,800 per year. Must have proof of legal authority to work indefinitely in the United States. Send résumé in duplicate (no calls) to: J. Davies, JOB #00191, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

SENIOR ENVIRONMENTAL SCIENTIST (ENVIRONMENTAL MERCURY CHEMIST)

The South Florida Water Management District has a 3-year opportunity immediately available in the Everglades Systems Research Division. The preferred candi-date will have a Ph.D. or M.S. in aquatic and sediment chemistry with an emphasis on heavy metals, and 4 years of experience with mass balance concepts and chemical fate/transport modeling. Additional requirements in-clude experience interacting with State and Federal Regulatory Agencies and the ability to explain mercury issues to lay and professional audiences. Field visits are required.

The District offers competitive salaries, excellent benefits and a smoke-free environment. New hires will be chis and a smoke-free environment. New hires will be required to successfully complete a pre-placement drug test. You may contact: Dr. Michael Chimney for additional information at (407) 687-6523. For consideration, send your résumé with social security number to: Hu-man Resources, Ref. SLS7140, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416. Equal Opportunity Employer.

MEETINGS

Association de Recherche pour le Traitement des Seropositifs (ARTS) Hôpital Laënnec, Université de Paris V

First International Symposium on CELLULAR APPROACHES TO THE CONTROL OF HIV DISEASE Paris, July 11-12, 1994 Organizers: Jean-Marie Andrieu, Wei Lu,

Philippe Cramer **Topics:**

- Immune activation and pathogenesis of HIV infec-
- Activation-induced apoptosis in the immune system and HIV disease.
- Mediators of T-cell/macrophage activation, apoptosis, and HIV replication.
 Therapeutic implications.

Abstracts (one-page A4) are welcome by FAX (+33 1 4222-0384 or +33 1 4439-6465). Registration: all information can be obtained from: S'cape/HIV, 8 rue Severo, 75014 Paris; Telephone: +33 1 4542-8274, FAX: +33 1 4044-5257.

SCIENCE welcomes placement of line classified ads by Internet Mail. Please include name and telephone number for our confirmation call when transmitting ad to: Internet E-Mail: Science____classifieds@aaas.org

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