

hope for Children
with AIDS

The Elizabeth Glaser Scientist Award

Pediatric AIDS Foundation

The Elizabeth Glaser Scientist Award will be given to five outstanding scientists each year whose research will greatly impact children with HIV/AIDS.

- Over a five year period, a maximum of 25 awards will be made to support outstanding investigators whose research will help resolve critical issues in pediatric HIV/AIDS. The end result will be new answers for the treatment and prevention of HIV/AIDS in children.
- The Award will provide between \$100,000 and \$150,000 in support each year for five years.
- International candidates from diverse disciplines whose research will impact children with HIV/AIDS are encouraged to apply.
- A maximum of five Scientists will be selected in December of 1995. Awards will begin in January of 1996.
- The Advisory Board will select the Scientists and ensure that the program meets its goals.

Eligibility:

- Each candidate must have an M.D., Ph.D., or D.V.M. degree and be at the associate professor level or above or be eligible for an associate professor appointment at the time of application. This Award, however, is not intended for highly established investigators.
- Research activities must take place at an accredited non-federal educational institution or education-affiliated institution. Persons being recruited but not yet hired will be considered with suitable explanation.
- Interested applicants must submit a pre-application package* in the following order:
 - A two page curriculum vitae with complete mailing information;**
 - A one page research plan;**
 - One letter of recommendation from the applicant's department chair.**
- Applicants who will be invited to submit full application packages will be notified by October 5th.

* Those interested in applying must send 12 copies of the pre-application package by August 15, 1995 to:

Patricia Devine
Pediatric AIDS Foundation
1311 Colorado Avenue
Santa Monica, CA 90404

ISCAN®

EYE MOVEMENT MONITORING SYSTEMS

ISCAN eye tracking products set the pace for performance and affordability in the research marketplace. Applications include fixation monitoring, vision research, advertising research, psycho-visual experiments, reading studies, toxicology, human factors evaluation and drug or alcohol response.

Non-invasive, real-time video image processors automatically measure pupil position and size and compute subject's point of



gaze. Benchtop, head mounted and high speed versions as well as computer data analysis software are available. Complete Eye Movement Monitoring Laboratories or component systems can be provided to suit any research application.

ISCAN, Inc.
P.O. Box 382076
Cambridge, MA 02238-2076 USA
Tel: 617-273-4455 Fax: 617-273-0076

Circle No. 10 on Readers' Service Card

Pharmacia Biotech & SCIENCE Prize for Young Scientists

IN MOLECULAR BIOLOGY 1995

Pharmacia Biotech and SCIENCE are joining forces to encourage scientists at the start of their careers with an award for graduate work in molecular biology. This major new worldwide prize will include US\$20,000 awarded to the best young scientist of the year, and up to 7 additional prizes of US\$5,000 each. Prizes will be presented in Stockholm, Sweden, during December 1995. The winning essay will be published in Science.

Full details can be requested from the administrator, at the address below, or via Internet to: science_editors@aaas.org (US/ROW enquiries) or to: science@science-int.co.uk (European enquiries)

The Award Committee
Pharmacia Biotech & SCIENCE Prize for Young Scientists
1333 H Street, NW, Washington, DC 20005 USA.
Tel: 202 202 326-6501, Fax: 202 408-8015

SCIENCE



PRODUCTS & MATERIALS

Gel Shift Kit

A new kit is available for the DNA mobility shift assay, which is widely used to characterize DNA binding proteins such as transcription factors. The kit is the first mobility shift assay carried out in a nontoxic horizontal electrophoresis format with resolution equivalent to acrylamide. The kit comes complete with positive control, end labeling reagents, and enough HeLa nuclear extract for 100 reactions. **Trevigen. Circle 138.**

DNA Concentrating System

The CentriVap DNA System is designed to process DNA samples or other minute quantities of solvents. The system includes the CentriVap Benchtop Concentrator, DNA Rotor, explosion-proof DNA Vacuum Pump, accessory Inlet Glass Trap, and all connect-



ing tubing. The concentrator makes use of centrifugal force along with vacuum to rapidly evaporate solvents from multiple small samples. **Labconco. Circle 139.**

Electronic Documentation System

The FOTO/Analyst Archiver Electronic Documentation System documents electrophoresis gels and stores images on a computer disk. Thermal prints can be produced economically at the touch of a button and up to four images can be written to specially for-

matted 3.5-inch floppy disks. An integration feature allows the acquisition of very low light fluorescent gels and thus extends the sensitivity beyond that of conventional photography. As little as 0.5 ng of ethidium bromide-stained DNA can be detected with the FOTO-Analyst Archiver system. **Fotodyne. Circle 140.**

Nucleic Acid Labels

New fluorescently labeled primers are labeled to a very high specific activity, typically 60 to 80%, and are complementary to widely used plasmid primer sites, making them suitable for synthesis of fluorescent DNA probes from most cloning vectors. The sequences can be labeled at one or both ends, depending on the application. These primers are particularly useful for detection using fluorescence polarization due to the extremely short spacer arm incorporated in the phosphoramidite and the high specific activity. **PanVera. Circle 141.**

Gel Documentation

Speedlight Platinum Jr gel documentation system combines the original Speedlight Jr gel documentation system for hard copy output with the Digital Disc Storage Device for capture and transfer of images to floppy disks to give both capabilities in one low-cost unit. Additional new features of the instrument include image saturation detection to ensure images are captured within linearity of the sensor; time, date, and text stamping; 15,000 frames of integration for low light applications such as chemiluminescence; and background subtraction to eliminate sensor noise for the lowest light applications. **B/T Scientific Technologies. Circle 142.**

Homogenizers

The Omni Mixer Homogenizer Series features an aerosol-free sealed homogenizing method designed for safety and versatility.

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

The nucleic acid labeling source

Ambion is your source for innovative kits for all your nucleic acid labeling needs

NEW! Kinase Max™

5' End Labeling Kit produces 1.5-3 times the yield than kits utilizing standard kinase buffers.

DECAprime™ II

For high specific activity DNA labeling with the random priming method. Fast five minute reaction maximizes probe yield and specific activity.

NEW! Prime-A-Probe™

For strand specific DNA probe synthesis. The kit utilizes specific primers and your linearized plasmid DNA to produce high specific activity probes for S1, Southern or Northern assays.

Contact us today for information on our full range of nucleic acid labeling kits for your specific applications.

(512) 445-6979 (512) 445-7139 FAX

(800) 888-8804

Ambion

Innovative Products for RNA Analysis

Circle No. 17 on Readers' Service Card

Unlike sealed systems that use a stopper, Omni's safety-sealed homogenizers meet all National Institutes of Health and Centers for Disease Control specifications for aerosol containment. A choice of four models ranges from 0.5-ml to 2-liter sizes. Unique cutting blades and rotor stator generator probes are interchangeable within the same chambers for versatility. Very fine particle size yields are possible from samples that would otherwise require several homogenizer products for comparable results. **Omni International. Circle 143.**

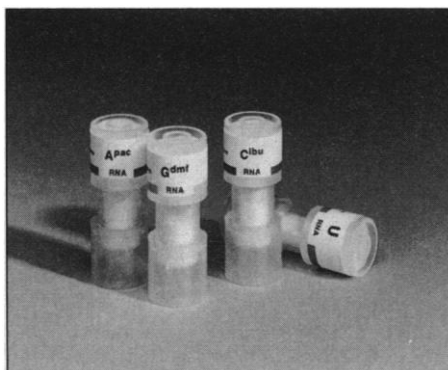


Density Gradient Fractionator

This instrument with its patented top-down piston displacement fractionation system offers resolving power comparable to high-performance liquid chromatography. Its air rinse system removes contamination between fractions from the point of gradient capture. An automated motor drive gives reproducibility and instant recall of fractionation protocols. The instrument features a tilted-tube rotation technique that can reduce the time required for gradient making from several hours to a few minutes. **Biocomp. Circle 144.**

RNA Synthesis Support

A new set of 1- μ mol RNA synthesis columns features a patented polystyrene support matrix that increases yield by preventing extraneous chain growth during nucleic acid synthesis. The matrix's inherent hydrophobicity enhances coupling efficiency by eliminating



hydrolysis of activated phosphoramidite. As a result, the crude synthesis product contains more full-length oligoribonucleotide, complementing the larger scale to deliver useful quantities of RNA for ribozyme studies, in vitro selection experiments, and structural analysis. **Perkin-Elmer. Circle 145.**

Literature

Chiral HPLC Columns for Cardiovascular Drugs is an application note on these devices for high-performance liquid chromatography (HPLC). **Phenomenex. Circle 146.**

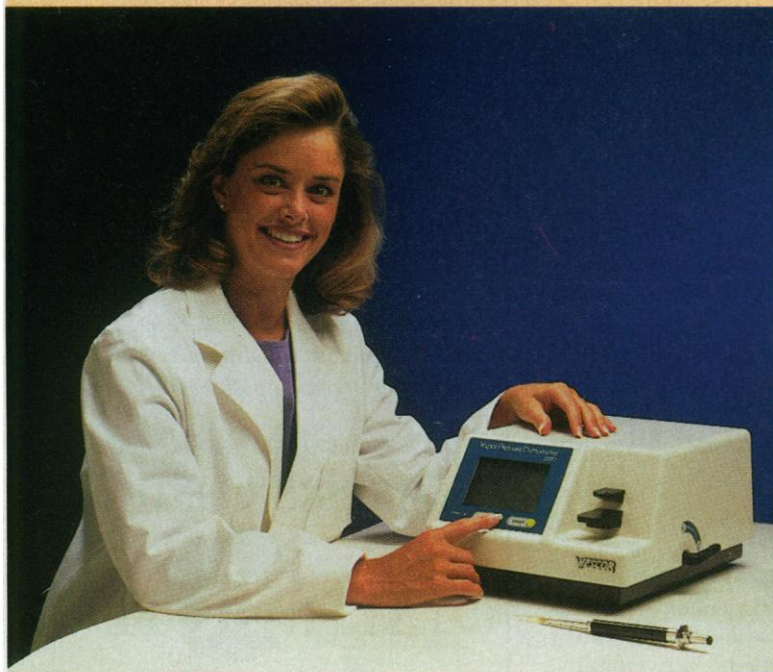
The SHARP Signal System is a technical brochure that describes a sensitive and specific enzyme-linked immunosorbent assay system for detection of polymerase chain reaction products. **Digene Diagnostics. Circle 147.**

Superior Membrane Processing in a Precision Controlled Environment contains information on a complete line of hybridization incubators, tubes, and accessories. **Robbins Scientific. Circle 148.**

The Last Word in Freeze Dryers from the First Name in the Business details the capabilities of a state-of-the-art product line. **Stokes Vacuum. Circle 149.**

Kamiya Biomedical Company: Research Biochemicals, Immunological Reagents is a catalog that includes enzyme inhibitors and monoclonal antibodies for research into apoptosis, multi-drug resistance, cancer, signal transduction, and free radicals. **Kamiya Biomedical. Circle 150.**

Anything that's frozen is never the same again.



WESCOR®

If you need to measure osmolality, basically you have two choices. You can measure osmolality using the older freezing point method, or you can use the modern-day vapor pressure osmometer from Wescor. Now available in a new, easier-to-use menu-driven version, the VAPRO™ osmometer accepts all biological samples, including the highly viscous and tissue specimens. *All without cryoscopic artifacts!* And it can be calibrated for samples as small as 2 μ L.

The Wescor vapor pressure osmometer is ideally suited for all areas of biological research. It's widely used in marine biology, tissue culture, soil and plant physiology, and lab animal studies. You'll also find it performing Q.C. work in the food, pharmaceutical, beverage, and ophthalmology industries.

Contact us for more details or to arrange a demonstration. Wescor, Inc., 459 South Main Street, Logan UT. 84321 USA. Phone 1-800-453-2725. FAX 801-752-4127.

Science

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

Deadlines: Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Ads must be submitted in writing.

How to Submit a Classified Ad:

Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training, Search Firms. *Science* cannot provide proofs of typeset line ads.

Mail, FAX or Email materials to:

Science Classified Advertising
1333 H Street, N.W., Room 814
Washington, DC 20005
Telephone: 202-326-6555
FAX: 202-682-0816
Internet Email: science_classifieds@aaas.org

Rates: Ads are \$43 per line; \$430 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads.

Estimates: *Science* will provide a cost estimate for line ads. This is an approximate cost only. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Gordon Clark at +44 1223 302 067 (telephone) or +44 1223 576 208 (FAX).

Credit Cards: *Science* accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

Cancellations: Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. for fractional display ads call:

Deborah Cummings
Recruitment Display Advertising
Telephone: 202-326-6541
FAX: 202-682-0816

Janis Crowley
Recruitment Advertising Manager
Telephone: 212-496-7704
FAX: 202-682-0816

Gordon Clark
European Recruitment Advertising
Telephone: +44 1223 302 067
FAX: +44 1223 576 208

SCIENCE JOBNET: Unless otherwise instructed, every classified advertisement submitted for publication in *Science* is automatically posted on *Science's* on-line classified advertising service, *SCIENCE JOBNET*, at no additional charge. **SCIENCE JOBNET address:** gopher.aaas.org

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

POSITIONS OPEN

BIOLOGICAL SYSTEMS ENGINEER ASSISTANT PROFESSOR

Nine-month, tenure-track, eleven-month term of employment. The candidate is expected to conduct research on the development of systems which integrate engineering and biology at a biochemical, cellular, or organismal level, with focus on applied biology problems in agriculture; to assist with undergraduate teaching in biology for engineers, transport processes in biological systems, or industrial applications of biotechnology; and to develop a graduate-level course in their research area. Applicants must have a Ph.D. in engineering, or a Ph.D. in a scientific field with a B.S. in engineering. They must have the ability and desire to conduct both independent and cooperative research, and the ability and interest in teaching biological engineering to undergraduate and graduate students. To apply, send curriculum vitae, summary of research and teaching experience, transcripts of undergraduate and graduate work, pertinent reprints, a thesis/dissertation abstract, and the names, addresses, and telephone numbers of at least three references to: **Dr. Michael J. Delwiche, Search Committee Chair, Department of Biological and Agricultural Engineering, University of California, Davis, CA 95616-5294. Telephone: 916-752-7023; FAX: 916-752-2640; Email: mjdelwiche@ucdavis.edu.** Open until filled, but to assure consideration, applications must be received by August 25, 1995. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR FOR NEWLY FORMED DEPARTMENT OF MOLECULAR BIOLOGY

The Masonic Medical Research Laboratory, a not-for-profit independent basic biomedical research institute located in the foothills of the Adirondack Mountains in upstate New York, invites applications for an individual to head its newly formed Department of Molecular Biology. Position is at a rank equivalent to **ASSOCIATE** or **FULL PROFESSOR**. Ph.D. and/or M.D. candidates with experience and interest in molecular biology aspects of the electrical function of the heart will be given preference. Appointee will have ready access to our world-renowned Experimental Cardiology team (electrophysiologists working at the single cell, tissue, organ and *in vivo* levels) as well as our Immunology group. A distinguished record of scientific achievement and a solid track record of extramural grant support are a must. To apply, send a letter of application, a curriculum vitae and names and addresses of three references to: **Dr. Charles Antzelevitch, Director, Masonic Medical Research Laboratory, 2150 Bleeker Street, Utica, NY 13501. Equal Opportunity/Affirmative Action Employer.**

LINDHOLM ENDOWED CHAIR IN GENETICS

Requirements include M.D. and/or Ph.D. degree and an international reputation in research, scholarship and education in the field of mammalian molecular genetics. The duties for this **TENURE-TRACK** position include establishing an outstanding research program and acting as a catalyst for the further development of academic programs in Genetics. Laboratory space will be provided in the newly constructed Children's Research Center at The University of Arizona College of Medicine. Review of applications will begin June 1, 1995, and continue until the position is filled. Send a letter describing current/future research and teaching interests, a curriculum vitae, and names/telephone numbers of five professional references from whom letters may be solicited to: **Search Committee for the Lindholm Endowed Chair, Section of Medical and Molecular Genetics, Department of Pediatrics, The University of Arizona Health Sciences Center, Tucson, AZ 85724. The University of Arizona is an Equal Employment Opportunity/Affirmative Action/ADA Employer. Women and minorities are encouraged to apply.**

ASSISTANT PROFESSOR, Ph.D., non-tenure-track, experienced in tissue culture and cellular/biochemical characterization of cells, to organize and direct tissue culture laboratory for the development of tumorigenic/non-tumorigenic pancreatic epithelial cell lines for Pancreatic Cancer Research Project at Wayne State University/Prentis Comprehensive Cancer Center of Metropolitan Detroit. Send or FAX curriculum vitae to: **V. K. Vaitkevicius, M.D., Michigan Cancer Foundation, 110 East Warren, Detroit, MI 48201. FAX: 313-933-7165. Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH FACULTY MAYO CLINIC SCOTTSDALE

A faculty position is available starting in 1996 at the **ASSOCIATE PROFESSOR** or higher level. Research programs will address the molecular basis of human disease. The new 75,000 square foot S.C. Johnson Medical Research Building houses laboratories and core facilities, including an 8,000 square foot animal facility devoted primarily to transgenic and gene inactivation operations. Mayo Scottsdale is fully integrated with and electronically coupled to Mayo campuses in Rochester, Minnesota and Jacksonville, Florida. Appointments are available in the appropriate department of the Mayo Graduate School of Medicine. Scottsdale faculty have active research programs in extracellular matrix, mucin molecular biology, myeloid cell differentiation, eosinophil-mediated inflammation, homeobox genes in nervous system development and the molecular pathophysiology of cystic fibrosis. Generous start-up and space allotments are provided. A strong record of extramural support is required. Please forward curriculum vitae, statement of research interest and names of three references to: **Faculty Search, S.C. Johnson Medical Research Center, Mayo Clinic Scottsdale, 13400 East Shea Boulevard, Scottsdale, AZ 85259. Mayo Clinic Scottsdale is an Affirmative Action Employer and Educator. It promotes cultural diversity in its workforce.**

PROFESSOR AND CHAIRPERSON/HEAD Department of Microbiology

Oregon State University invites applications/nominations of accomplished scientists to provide leadership to the Department of Microbiology, in both education and research. This tenured, 12-month position is funded at 1.0 FTE. Salary is negotiable, commensurate with qualifications and experience. Appointee must have a doctoral degree in microbiology or a closely related field, and several years of experience at a senior level. Experience in securing and administering research funds is essential, and other administrative experience is desirable. For full consideration, send applications by September 1, 1995, to: **Dr. Christopher K. Mathews, Department of Biochemistry and Biophysics, Oregon State University, Corvallis, OR 97331-7305. Telephone: 503-737-4511; FAX: 503-737-0481; Email: mathewsc@bcc.orst.edu. Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual-career needs.**

FACULTY-LEVEL POSITION LABORATORY OF PARASITIC DISEASES NATIONAL INSTITUTES OF HEALTH

A position is available for a leader of an independent group in Medical and Molecular Entomology. The position is for **TENURE/TENURE-TRACK** in the Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health. We are looking for a person who can contribute to and profit from the many strengths of the intramural program. U.S. citizenship is required for a tenured position. Application submission deadline is 30 days from date of this publication. Applications should include a curriculum vitae with bibliography, statement of research interests and the names and addresses of three references. Applications should be sent to: **NIAID Personnel Office, Building 31, Room 7A-20, National Institutes of Health, 9000 Rockville Pike, Bethesda, MD 20892. ATTN: Kristic Daniel, Announcement No: AI-95-049. NIH is an Equal Opportunity Employer.**

ASSISTANT PROFESSOR: Theoretical Visual Neuroscience Center for Neural Science and Courant Institute of Mathematical Sciences. As part of its Sloan Theoretical Neuroscience Program, the Center for Neural Science at New York University, together with the Courant Institute of Mathematical Sciences, is planning to hire an Assistant Professor (tenure-track) in the field of Theoretical Visual Neuroscience. Applicants should have a background in mathematics, physics, and/or computer science with a proven record of research in visual science or neuroscience. Applications (deadline June 30, 1995) should include a curriculum vitae, names and addresses of at least three individuals willing to provide letters of reference, and a statement of research interests. Send to: **Sloan Search Committee, Center for Neural Science, New York University, 4 Washington Place, New York, NY 10003. NYU encourages applications from women and members of minority groups.**

POSITIONS OPEN

ASSISTANT PROFESSOR INSTRUCTOR OF INTERNAL MEDICINE

The Department of Internal Medicine of the University of Texas Southwestern Medical Center at Dallas is seeking candidates for the position of **INSTRUCTOR**. Individual must have a Ph.D. and/or M.D. and be accomplished in modern molecular biology (DNA sequencing, PCR, cell culture, Southern, Northern, Western blotting, subtractive hybridization, immunoprecipitation, transfection with expression vectors, generation of oligonucleotides and peptides, and SSCP). Must also be able to conduct small animal experiments. **ASSISTANT PROFESSOR** position requires an M.D. degree, be Board-certified in Internal Medicine and Board-certified or Board-eligible in Endocrinology. Must have published experience in diabetes/obesity research and be experienced in molecular biology. Must also be able to carry out small animal experiments *in vivo* and with perfused organs. Submit curriculum vitae and three letters of recommendation to: **Dr. Roger Unger, Center for Diabetes Research, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-8854.** The University of Texas is an Equal Employment Opportunity Employer.

The University of California, Los Angeles (UCLA) School of Medicine is seeking nominations and applications for the position of **DIRECTOR** of the Neuropsychiatric Institute and **EXECUTIVE CHAIR** of the Department of Psychiatry. The Director of the Neuropsychiatric Institute provides leadership and resources for the investigation of the neurobiology of mental illness. The individual must demonstrate leadership in educational, clinical and research programs and have experience in academic administration. Candidates should possess an M.D. degree or equivalent and have a distinguished record of teaching, research, mentoring and service. The search committee will accept nominations and applications until the position is filled. Submissions should include a letter of application or nomination, curriculum vitae and the names, addresses and telephone numbers of three or more references. Send nominations and applications to: **Alan M. Fogelman, M.D., Chair, Search Committee for Psychiatry, Department of Medicine, 37-120 CHS, Box 951736, 10833 Le Conte Avenue, Los Angeles, CA 90095-1736.** UCLA is an Equal Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply.

RESEARCH ASSISTANT/ ASSOCIATE PROFESSOR Ph.D./Molecular Biology Diagnostics

The University of New Mexico (UNM) School of Medicine, Department of Pathology and the UNM Cancer Center is seeking an individual to be **ASSOCIATE DIRECTOR** of the Molecular Oncology/Molecular Genetics Diagnostic Laboratory. Minimum requirements: A Ph.D. with experience in molecular biology and molecular diagnostics (preferably human molecular diagnostics) is required. American Board of Medical Genetics eligibility/certification is desirable, though not required. The successful candidate will be responsible for the day-to-day operation of the diagnostic laboratory (designing and developing new diagnostic assays; supervising and training technicians and fellows), will assist in the direction of a national adult leukemia research program, and will have research opportunities in cancer genetics. Rank and salary for this non-tenure-track faculty position will be commensurate with experience. For best consideration, please apply by July 14, 1995. Curriculum vitae, a cover letter detailing experience, and names of three references should be sent to: **Cheryl L. Willman, M.D., UNM Cancer Center, 900 Camino de Salud, N.E., Albuquerque, NM 87131.** FAX: 505-277-6139. UNM is an Equal Opportunity/Affirmative Action Employer.

ANATOMY AND MICROBIOLOGY TEACHING POSITIONS

Available at American University of the Caribbean School of Medicine, Montserrat, West Indies. Applicants must have a Ph.D. or M.D. degree and be devoted to teaching medical students. American curriculum taught in English. Send résumé to: **MEIO-S, 901 Ponce de Leon Boulevard, No. 201, Coral Gables, FL 33134.** Telephone: 305-446-0600.

POSITIONS OPEN

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE Department of Molecular and Cellular Physiology

Applications are invited for a full-time, tenure-track position at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level. Applicants should have a Ph.D., M.D., or equivalent and have a record of excellence in cell regulation and signal transduction. The Department has an NIH Training Grant to support its successful graduate and postdoctoral training program. Participation in medical and graduate education is required. Excellent laboratory space and core facilities are available in structure biology, molecular biology, murine physiology and transgenic mouse gene targeting. Applicants should submit curriculum vitae, a description of research plans, and the names of three references to:

**Search Committee
c/o Rhonda Hentz
Department of Molecular and Cellular Physiology
College of Medicine
University of Cincinnati
P.O. Box 670576
Cincinnati, OH 45267-0576**

The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. Disabled and Vietnam-era veterans, disabled persons, members of historically underrepresented minorities, aboriginal persons, and women are encouraged to apply.

MICROBIOLOGY Assistant Professor (Tenure-Track)

The Medical College of Ohio invites applications for a **TENURE-TRACK POSITION** in the Department of Microbiology. Candidates must have a doctoral degree and postdoctoral research experience. Primary research interests should involve molecular aspects of pathogenesis, with emphasis on host-pathogen interactions. Teaching responsibilities include participation in a microbiology course for medical students and development of a graduate level course in molecular pathogenesis. The successful candidate is expected to develop an independent research program based on extramural support. Start-up funds and a state-supported salary are available. A curriculum vitae, future research plans, and three letters of recommendation should be sent to: **Chairman, Department of Microbiology, Medical College of Ohio, 3000 Arlington Avenue, Toledo, OH 43699.** Medical College of Ohio is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR PHYSIOLOGY/CELL BIOLOGY

The Department of Physiology and Cell Biology at the University of Nevada, School of Medicine is seeking applicants for a full-time, tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Applicants should have a Ph.D., M.D., or equivalent degree and postdoctoral experience. The Department is seeking an individual with interest in the molecular basis of cell growth and signaling, including studies on growth factors, signal transduction and G-protein linked receptors. It is expected that the new faculty member will develop independent research programs and participate in the teaching of medical and graduate students. Applicants should submit curriculum vitae, a description of research plans, and provide for three references to be sent to: **Dr. Burton Horowitz, Search Committee Chair, Department of Physiology, University of Nevada, School of Medicine, Reno, NV 89557.** Deadline June 30, 1995. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS: Available for students in various aspects of cancer research and toxicology in the Center in Molecular Toxicology through the Departments of Biochemistry, Cell Biology, Chemistry, Medicine, Pathology, and Pharmacology. Areas of investigation relating to toxicology and carcinogenesis are: 1) enzymatic oxidation and conjugation; 2) oxidative damage; 3) DNA adduct chemistry; 4) mechanisms of mutagenesis; 5) structural and regulatory biology; 6) analytic method development; 7) neurotoxicology; and 8) molecular epidemiology and prevention. Center faculty include **Drs. Richard N. Armstrong, Ian A. Blair, Raymond F. Burk, Raymond N. DuBois, Doyle G. Graham, F. Peter Guengerich, Thomas M. Harris, Lawrence J. Marnett, Timothy J. Meredith, Jennifer A. Pietenpol, Michael P. Stone, and Michael R. Waterman.** Salaries are negotiable. Applicants should submit curriculum vitae and three letters of recommendation to: **Dr. F. Peter Guengerich, Director, Center in Molecular Toxicology, Vanderbilt University, School of Medicine, Nashville, TN 37232-0146.** An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION Molecular Genetics of Hypertension

Available for the identification of genes controlling blood pressure in genetically hypertensive rats. Techniques include library construction and screening, cloning, RFLP analysis, PCR, DNA sequencing, linkage analysis, positional cloning and construction of congenic strains. Applicants must have a Ph.D. Experience in molecular biology and/or genetics is desirable. Send curriculum vitae to: **Dr. John Rapp, Chairman, Department of Physiology and Molecular Medicine, Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for Ph.D. in neurobiology to study the role of endogenous neurotoxins in neurodegeneration. Interested candidates possessing experience in using isolated nerve terminals, stereotaxic injection, and cell culture methods should send curriculum vitae, a brief statement of research interest, and names and telephone numbers of three references to: **Dr. Michael B. Mattammal, 11G, VA Medical Center, No. 1 Jefferson Barracks Drive, St. Louis, MO 63125.** Must be U.S. citizen.

POSTDOCTORAL FELLOWSHIP UNIVERSITY OF PENNSYLVANIA

SENIOR POSTDOCTORAL POSITION available immediately for the study of the molecular biology of ion channels in smooth muscle. Send curriculum vitae and names of three references to: **M. Kotlikoff, Department of Animal Biology, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104-6046.**

A **POSTDOCTORAL POSITION** is immediately available to study modification of neuronal and vascular cell signal transduction pathways using viral vector mediated gene transfer and electrophysiological analysis of cell function. Previous experience in molecular or cell biology, or virology is desirable. Send description of interests and experience, curriculum vitae, and list of three references to: **Robert H. Cox, Ph.D., Graduate Hospital, One Graduate Plaza, Philadelphia, PA 19146.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in molecular neurobiology of neurodegenerative diseases, including Alzheimer's disease, in established multidisciplinary laboratory. Qualifications include a Ph.D. or M.D. A strong background is desired in biochemistry and molecular biology to explore the molecular basis of these diseases. Submit curriculum vitae, and three references to: **Dr. Carol A. Miller, USC School of Medicine, Department of Pathology, MCA-345, 2011 Zonal Avenue, Los Angeles, CA 90033.** FAX: 213-342-1808.

POSTDOCTORAL POSITIONS

POSTDOCTORAL POSITIONS are available to study the role of proteases and von Willebrand factor in vascular biology and hemostasis. Experience in protein biochemistry, molecular biology, or mouse genetics is desirable. Please send curriculum vitae, the names of three references, and a brief summary of research experience to: **J. Evan Sadler, M.D., Ph.D., Washington University School of Medicine, 660 South Euclid Avenue, Box 8022, St. Louis, MO 63110.** Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately for NIH-funded study of thalamic neuropathology in schizophrenia. Experience with large sectioning techniques, human thalamic anatomy, stereological techniques a plus. Two-year position with excellent salary and benefits for qualified applicant. Send résumé and three reference telephone numbers to: **Keith A. Young, Ph.D., Neuroscience Lab (11s), Waco VAMC, 4800 Memorial Drive, Waco, TX 76711.** FAX: 817-755-8768; Email: young.keith@waco.va.gov.

POSTDOCTORAL ASSOCIATE-Molecular Genetics—Position available immediately for projects concerning the identification and characterization of novel genes involved in human cancers. Stimulating interactive research environment. Experience with techniques for the analysis of mammalian genomes, including strategies for differential cloning preferred. Submit curriculum vitae and names of three references to: **Joseph R. Testa, Ph.D., c/o Human Resources-MAM, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** Equal Opportunity Employer.

Tenure-Track And Postdoctoral Opportunities.

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

Tenure-Track Position Assistant Professor Equivalent

Reproduction Endocrinology
Carolyn Bondy, MD

A position is available to develop an independent research program investigating fundamental mechanisms of reproduction. Expertise in laboratory investigation with an emphasis on current molecular strategies is required. The candidate must be certified in Reproductive Endocrinology and prepared to eventually assume leadership of the NICHD Reproductive Endocrinology program. A two-page statement of research interests and goals should be submitted in addition to three letters of recommendation. Developmental Endocrinology Branch (OE-82), NICHD, Building 10, Room 10N262, 10 CENTER DR MSC 1862, BETHESDA MD 20892-1862.

Postdoctoral Positions

Behavioral Genetics
Jacqueline N. Crawley, PhD

A position is available to conduct behavioral analyses of transgenic and knock-out mice, and of rodent strains with rare genotypes, relevant to neuropsychiatric disorders. Opportunities exist for collaborations with investigators from several NIH Institutes on the Bethesda campus to test new mutations in neurotransmitters, receptors, developmental, and structural genes. Experience in behavioral genetics and behavioral neuropharmacology is required. Section on Behavioral Neuropharmacology (OE-82), NIMH, Building 10, Room 4N212, 10 CENTER DR MSC 1380, BETHESDA MD 20892-1380.

Cellular Neuroscience
R. Douglas Fields, PhD

Signaling pathways regulating gene expression, cell adhesion, axon guidance, and synaptic plasticity during nervous system development are being studied in neuronal culture. Applicants should have an interest in activity-dependent remodeling of the nervous system, expertise in quantitative PCR or standard molecular techniques, and must have less than five years of postdoctoral experience. Laboratory of Developmental Neurobiology (OE-82), NICHD, Building 49, Room 5A38, 49 CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

Molecular Neurobiology
David C. Klein, PhD

Efforts will be focused on the molecular analysis of the neural and developmental regulation of genes involved in melatonin synthesis. Candidates must be fully trained in molecular biology and have special expertise in expression cloning, subtraction techniques or related methodologies. Laboratory of Developmental Neurobiol-

ogy (OE-82), NICHD, Building 49, Room 5A38, 49 CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

Neuropharmacology of Memory in Monkeys
Mortimer Mishkin, PhD

The neuropharmacological and neurochemical aspects of learning and memory in primates are being investigated utilizing the techniques of *in vivo* microdialysis and direct intracerebral drug injections. A special emphasis is placed on the contributions and interactions of the cholinergic and glutamatergic systems. Applicants should have a strong background in pharmacology and/or biochemistry and behavioral testing methods (preferably in primates). Laboratory of Neuropsychology (OE-82), NIMH, Building 49, Room 1B80, 49 CONVENT DR MSC 4415, BETHESDA MD 20892-4415.

Oxidative Stress Antioxidant Defense Mechanisms
Rodney L. Levine, MD, PhD

The molecular responses to oxidative stress, especially those mediated through modification of proteins is being studied. The specific topic of study will be selected jointly by the successful candidate and Dr. Levine and will focus on the biochemistry, molecular biology, or cellular biology of oxidative stress. Laboratory of Biochemistry (OE-82), NHLBI, Building 3, Room 106, 3 CENTER DR MSC 0320, BETHESDA MD 20892-0320, Fax 301-496-0599, Email rlevine@nih.gov.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.cu.nih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "7,Even,1". When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJL1" for account number.

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

To Apply

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



National Institutes Of Health

Office of Education

The NIH is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION Albert Einstein College of Medicine

A POSTDOCTORAL POSITION is immediately available in a NIH-supported research project utilizing novel SCID mouse models chimeric for the human immune and hematopoietic system to study the immunopathogenesis of HIV infection and the efficacy of therapeutic interventions including gene therapy (*JEM*, 179: 513, 1994; *PNAS*, 91:8032, 1994; *JL*, 154:907, 1995). Candidates should have significant expertise in molecular biology, cellular immunology, tissue culture and a serious interest in HIV research. Please send curriculum vitae and names of three references to: **Dr. Harris Goldstein, Albert Einstein College of Medicine, Chanin 601, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS INSTITUTE OF MOLECULAR BIOLOGY ACADEMIA SINICA, TAIWAN, ROC

Several POSTDOCTORAL POSITIONS in the Institute of Molecular Biology, Academia Sinica, will be available starting July 1, 1995. Recent Ph.D. with training and interest in one or more research areas including cell biology, molecular biology, molecular genetics, gene regulation, transgenic mice technology, immunology, virology, signal transduction, protein biochemistry, and crystallography are encouraged to apply. Candidates will participate in the collaborative projects formed among faculty members within the institute. Salary U.S. \$24,000 to \$28,500 per annum. Detailed information available upon request. Please send curriculum vitae and three letters of reference by mail or FAX to: **Postdoctoral Search Committee, c/o Fei Chen, Institute of Molecular Biology, Academia Sinica, Nankang, Taipei 11529, Taiwan, ROC. FAX: 886-2-782-6085.**

POSTDOCTORAL POSITION CELL CYCLE REGULATION

A POSTDOCTORAL POSITION is available in the laboratory of **Stephen A. Osmani** at the Weis Center for Research to study cell cycle regulation (see *EMBO J*, 14: 986-994, and 995-1003, 1995). Experience in genetics or molecular biology or biochemistry a plus but a strong publication record most important. Please send curriculum vitae, copies of publications and names of three references to: **Geisinger Human Resources (SAO), 100 North Academy Avenue, Danville, PA 17822-1529. Email: sao@smtp.geisinger.edu. Equal Opportunity Employer/Minority/Female/Disabled/Veteran.**

POSTDOCTORAL FELLOW THE BOSTON UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF PHARMACOLOGY

Electrophysiologist sought for a POSTDOCTORAL POSITION in the Laboratory of Molecular Neurobiology, a multidisciplinary research group interested in the modulation and regulation of ligand-gated ion channels in neurons. Electrophysiological, pharmacological, biochemical, and molecular biological techniques are combined to study the mechanisms of receptor modulation and regulation by neurosteroids and phosphorylation factors. Receptors systems under investigation include the glutamate, GABA, and glycine receptors. Previous electrophysiology experience required; previous single channel recording experience desirable. Send curriculum vitae and references to: **Dr. David H. Farb, Chairman, Department of Pharmacology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118-2394.**

POSTDOCTORAL POSITIONS IN STRUCTURAL BIOLOGY

Structural Biology laboratory focusing on the p53 tumor suppressor system and the cell cycle regulatory cyclin-CDK complexes has POSTDOCTORAL POSITIONS available. Successful applicants will assume projects aimed at understanding the structural biology of related macromolecular systems that regulate eukaryotic cell growth and proliferation. The preferred candidates will be highly motivated and have experience in macromolecular crystallography and biochemistry. Candidates who focus on computational methods are also encouraged to apply. Send curriculum vitae and names of three references to: **Dr. Nikola P. Pavletich, Memorial Sloan-Kettering Cancer Center, Box 576, 1275 York Avenue, New York, NY 10021. FAX: 212-717-3066. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN



The USDA-Agricultural Research Service announces a two year POSTDOCTORAL POSITION at West Lafayette, Indiana. The incumbent will be located in facilities of Purdue University's Animal Sciences Department. Research will include quantifying effects of stressors and food-animal production environments on the immune system. The parameters identified may be used to develop management systems which minimize or eliminate production stress, and health losses associated with exposure to identified environments and/or stressors. Ph.D. in Immunology or a related field and research experience using immunological techniques is required. Research experience with food-producing animals is preferred. Salary range is \$35,578 to \$42,641 per annum based on qualifications and experiences. For program information contact: **Dr. J. Morrow-Tesch, telephone: 317-494-8022.** For the vacancy announcement and application procedures, contact **Janie Carr, telephone: 301-344-4569.** Incomplete applications will not be considered. *ARS is an Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS VASCULAR BIOLOGY/THROMBOSIS CLEVELAND CLINIC FOUNDATION

POSTDOCTORAL POSITIONS available to candidates with experience in the areas of signal transduction, adhesion receptors, or cytoskeletal proteins. Studies will include: 1) regulation of integrin-induced transmembrane signaling; 2) role of the cytoskeleton in recruiting and activating signaling molecules; and 3) characterization of cytoskeleton-adhesion receptor interactions. Candidates should have a strong interest in vascular biology or thrombosis. Experience in molecular biology, electron microscopy, or fluorescence microscopy is desirable. Please forward curriculum vitae and the names of three references to: **Dr. Joan E. B. Fox, Joseph J. Jacobs Center for Thrombosis and Vascular Biology (FF20), Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. The Cleveland Clinic Foundation is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.**

A POSTDOCTORAL POSITION is available to study phosphorus metabolism in *Rhizobium meliloti*. Funding is available for a minimum of two years. Requirements include a Ph.D. in a relevant field and experience in molecular biology and/or bacterial physiology. Screening begins June 15, 1995. Please send a letter of interest, a curriculum vitae, and the names and telephone numbers of three references to: **Dr. Tim McDermott, c/o Kathy Jennings, Secretary, Department of Plant, Soil and Environmental Sciences, Montana State University, Bozeman, MT 59717-0312. Telephone: 406-994-2190. ADA/Equal Opportunity/Affirmative Action/Veterans Preference.**

POSTDOCTORAL RESEARCH ASSOCIATE

The USDA, Agricultural Research Service (ARS), U.S. Grain Marketing Research Laboratory is seeking qualified applicants to fill a temporary (two-year POSTDOCTORAL) position to study mechanisms of cold tolerance by stored grain insect pests. Position available September 17, 1995, starting salary of \$42,641 per annum. Ph.D. in entomology or invertebrate physiology or biochemistry required. Experienced in methods of studying cold tolerance of insects and knowledge of effects of cold temperature on insect acclimation and survival is desirable. Send résumé, transcripts, and list of at least three references to: **Dr. David Hagstrum, Research Entomologist, USDA-ARS, 1515 College Avenue, Manhattan, KS 66502. USDA-ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION in Drug Delivery—Position available for a motivated individual in biomedical engineering, chemistry, biochemistry or related area. Person will develop and evaluate novel polymeric drug delivery systems to target anticancer drugs to brain tumors. To apply send complete curriculum vitae to: **James M. Gallo, Ph.D., c/o Human Resources-MAM, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.**

POSITIONS OPEN

VISITING POSTDOCTORAL RESEARCH PHYSICIST

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

POSTDOCTORAL POSITIONS Academia Sinica, Taiwan, ROC

Several postdoctoral positions in the category of the Academia Sinica POSTDOCTORAL FELLOW are available immediately to work in different Institutes of the Academia Sinica. Research areas spreading over Humanities and Social Sciences, Mathematics and Physical Sciences, and Life Sciences. Those who have obtained a Ph.D. with distinction within the last four years are eligible to apply. No deadline for application but the review process takes place on a quarterly basis starting from July 1995. Appointment for successful candidates lasts for two years per term, renewable for another term. Salary U.S. \$33,350 to \$36,500 per annum plus reimbursement for travel expenses for overseas candidates. Please send a completed application form (available upon request made via telephone or FAX), a research plan, curriculum vitae, reprints of recent publications, and three letters of reference to: **Central Advisory Committee, Academia Sinica, Nankang, Taipei 11529, Taiwan, ROC. Telephone: 886-2-789-9406; FAX: 886-2-783-4496.**

FISHERIES ECOLOGY

POSTDOCTORAL RESEARCH POSITION available September 1995 to study habitat relationships of anadromous clupeid fishes in Virginia coastal rivers and their tributaries. The successful candidate will have a strong background in stream/river fish ecology, extensive field experience, a working knowledge of GIS, and excellent writing skills. For more information, contact: **Dr. Greg C. Garman, Center for Environmental Studies, Box 842012, Virginia Commonwealth University, Richmond, VA 23284-2012. Telephone: 804-828-1562; Email: ggarman@cabell.vcu.edu. Virginia Commonwealth University is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Postdoctoral research associate position is available at the University of Chicago, Department of Anesthesia and Critical Care. Position is supported by the NIH. Studies concern mechanisms involved in damage from retinal ischemia using animal models. Current projects are especially concerned with the role of adenosine and nitric oxide. We use measurements of blood flow, electrophysiology, biochemistry, and histopathology. Background in neuroscience, physiology, or vision research is desirable, with either a Ph.D. or M.D. Salary is negotiable. Please send letters with curriculum vitae to: **S. Roth, M.D., Department of Anesthesia and Critical Care, University of Chicago, 5841 South Maryland Avenue, Box MC 4028, Chicago, IL 60637. FAX: 312-702-3535. University of Chicago is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION is available immediately to study the biochemical pathways and second messenger systems regulating membrane excitability and sensitization in dorsal root ganglion sensory neurons. Experience with electrophysiological recording techniques preferred but not required. Opportunities to explore both the biochemical and neurophysiological actions of proinflammatory agents, especially eicosanoids, in the enhancement of neuronal sensitivity to excitatory chemical agents such as bradykinin and capsaicin (see *Journal of Physiology*, 480:485). Send curriculum vitae, summary of research interests, and names of three references to: **Dr. Grant Nicol, Department of Pharmacology, School of Medicine, Indiana University, Indianapolis, IN 46202-5126. Email: gnicol@indyvax.iupui.edu. Indiana University is an Equal Opportunity/Affirmative Action Employer.**

CANCER PREVENTION FELLOWSHIP PROGRAM

The Division of Cancer Prevention and Control (DCPC), NCI, is accepting applications for the Cancer Prevention Fellowship Program (CPF). 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 Health training* (at accredited university programs); *Participation in the DCPC Cancer Prevention and Control Academic Summer Course* (open to 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, Fellows will be accepted for up to three years of training, beginning July 1, 1996. 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 USMLE or ECFMG 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. 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

The applicant must be a U.S. citizen 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, home address, and where you heard about the program 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, Suite T-41
6130 EXECUTIVE BLVD MSC 7105
BETHESDA MD 20892-7105

Further Inquiries: Mrs. Barbara Redding - tel: (301) 496-8640; fax: (301) 402-4863; email REDDINGB@dcpceps.nci.nih.gov

DEADLINE FOR RECEIPT OF APPLICATIONS: SEPTEMBER 1, 1995

NIH is an Equal Opportunity Employer

PROFESSOR AND HEAD OF THE DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS

HARVARD MEDICAL SCHOOL

Harvard Medical School is seeking an outstanding medical scientist to serve as the Adele Lehman Professor of Microbiology and Molecular Genetics and Head of the Department of Microbiology and Molecular Genetics. The department head of microbiology and molecular genetics is responsible for providing strong leadership in basic research, in recruitment and coordination of faculty, and in the teaching of medical students, graduate students, and research fellows. He/she is also responsible to the Dean for the development of the department's short- and long-range academic plans. The successful candidate must be an outstanding scholar who is widely recognized as preeminent in the fields of cellular, molecular, and/or experimental microbiology and molecular genetics. Areas for research could include virology, bacteriology, microbial pathogenesis, as well as other areas of microbiology and molecular genetics.

Applicants should submit a curriculum vitae and a statement of research interests immediately to: **Dr. Peter M. Howley, Chairperson of the Department of Pathology and Chairperson, Search Committee, Harvard Medical School, Building D2, Room 630, 200 Longwood Avenue, Boston, MA 02115.**

Harvard Medical School is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority candidates are encouraged to apply.

Sequencing in Diagnostic Research

Pharmacia Biotech Inc. is pleased to invite you to a one day symposium on the theme "Sequencing in Diagnostic Research". This one day free symposium will take place at the following locations:

**MONDAY
JUNE 12**
NEW YORK CITY
The Rockefeller
University

**TUESDAY
JUNE 13**
WASHINGTON, DC
Rockville, MD
Doubletree Hotel,
(formerly Crouse
Plaza)

**THURSDAY
JUNE 15**
SAN DIEGO
La Jolla Marriott

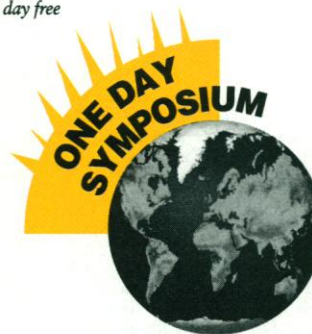
**PLEASE CALL 1-800-526-3593 EXT.2222 TO
REGISTER VIA VOICE MAIL, OR REACH US VIA E-MAIL
AT erin.weisberg@uspis.pharmacia.se**

If you call to register please include name, address and phone number. Registration is limited. A complimentary breakfast and lunch is included with your registration.

A registration confirmation with detailed directions will be sent to you within one week from your registration.

SYMPOSIUM PROGRAM

8:15 am - 9:15 am	Registration & Continental breakfast	12:00 pm - 1:30 pm	Lunch
9:15 am - 10:00 am	<i>Solid Phase Sequencing as a Clinical Tool</i> M. Uhlen, Ph.D., Professor, Royal Institute of Technology, Stockholm, Sweden	1:30 pm - 2:15 pm	<i>The Use of Sequencing for Characterizing HLA Class I Molecules</i> W. Hildebrand, Ph.D., University of Oklahoma, Oklahoma City, OK
10:00 am - 10:45 am	<i>Potential Applications of Sequence Based Diagnosis for Hemoglobinopathies in the Clinical Laboratories</i> & <i>Alpha-Thalassemia and Its Impact on Other Clinical Conditions</i> L. Bowie, Ph.D., Director, Clinical Laboratories, Evanston Hospital, Evanston, IL	2:15 pm - 2:45 pm	<i>Innovations and New Product Development for Clinical Research</i> Pierre Chretien, Pharmacia Biotech Inc., Montreal, Canada
10:45 am - 11:15 am	Coffee	2:45 pm - 3:30 pm	<i>Sequence Based Diagnostics - A Tool in the Diagnostic Laboratory of the Future: Clinical Studies on p53 Mutations in Breast Cancer</i> Margaret Bywater, Med. Fil. Lic. (Path), Pharmacia Biotech AB, Uppsala, Sweden
11:15 am - 12:00 pm	<i>Manifold-Assisted Genetic Analysis</i> Ulf Landegren, M.D., Ph.D., BMC, Uppsala, Sweden	3:30 pm	Close



 **Pharmacia
Biotech**

POSITIONS OPEN

SIGNAL TRANSDUCTION

Mechanisms of Regulation of MAP kinase and Jun kinase

POSTDOCTORAL POSITIONS funded by an NIEHS Environmental Pathology Training Grant (NRSA) are available immediately at the University of Vermont College of Medicine within the Molecular Pulmonary Research Group to investigate the regulation of protein kinase cascades in normal lung and models of airway disease. The projects will focus on signal transduction events from cell surface receptors through the MAP kinase and Jun kinase pathways. With emphasis on identification of novel activators of the pathways. The successful candidates will have a Ph.D., M.D., or D.V.M., with experience in cDNA cloning, and mammalian cell transfections. Please forward curriculum vitae to: **Dr. James Posada, University of Vermont, Department of Molecular Physiology, Given Building, Room E-205, Burlington, VT 05405. FAX: 802-656-0747; Email: jposada@moose.uvm.edu.** The University of Vermont is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS are available to participate in studies directed at the mechanisms of recovery after CNS injury. Projects emphasize neuronal survival, axon regeneration and interventions that enhance recovery. The positions are funded by a Program Project (five years) and two training grants from the NIH. Experimental approaches include grafting strategies using fetal tissue and genetically modified cells, studying the role of neurotrophins in recovery, analysis of motor behavior, synaptic function and regulation of gene expression during regeneration. The strong interaction among the program investigators provides excellent opportunities for training in neuroscience, electrophysiology, biomechanics and behavior analysis, neuropharmacology, cell and molecular biology. The Department of Anatomy and Neurobiology has state-of-the-art facilities in image, kinematic, and molecular analysis. Applicants for positions in training grants must be U.S. citizens or permanent residents. Qualified applicants should submit their curriculum vitae and three references to: **Dr. Marion Murray, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129.**

POSTDOCTORAL POSITION CELL SIGNALING

Position supported by NIH grant to study the roles and regulation of InsP3 receptors. See *JBC*, 269:7963. Experimental approaches will involve molecular biology, immunohistochemistry and use of fluorescent indicators. Send letter of application, curriculum vitae and three letters of reference to: **Richard J. H. Wojcikiewicz, Ph.D., Department of Pharmacology, College of Medicine, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210.** Review of résumés will begin immediately and continue until the position is filled. *SUNY-Health Science Center is an Affirmative Action/Equal Employment Opportunity/ADA Employer, committed to excellence through diversity.*

POSTDOCTORAL POSITION: Signaling by G-protein coupled receptors. Position available to study the molecular basis of specificity and signaling for the parathyroid hormone/glucagon subfamily of G-protein coupled receptors. Ph.D. or M.D. with experience in molecular biology, preferably including sequencing and mammalian cell expression. Please send curriculum vitae with the names and telephone numbers of three references to: **Robert A. Nissenson, Ph.D., University of California, San Francisco, VAMC (11N), 4150 Clement Street, San Francisco, CA 94121. FAX: 415-750-6929; Email: chicago@itsa.ucsf.edu.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately to study biochemical aspects of viral-induced autoimmune diseases. Recent Ph.D. with knowledge/experience in T-cell cloning/hybridoma, epitope mapping and some virology, is needed. Salary negotiable. Send résumé and three references to: **Dr. F. Mokhtarian, Immunology, Maimonides Medical Center/SUNY Health Science Center, 4802 10th Avenue, Brooklyn, NY 11219.** An Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN NEUROSCIENCE

University of Texas
Medical Branch at Galveston

The Department of Anatomy & Neurosciences and the Marine Biomedical Institute at the University of Texas Medical Branch (UTMB) at Galveston is seeking **POSTDOCTORAL CANDIDATES** for positions in Neuroscience starting after July 1, 1995. The fields of investigation supported by a Training Grant from the NINDS are mechanisms of pain and analgesia (including work on neuropathic, arthritic, visceral and central pain); neural control of locomotion in *Aplysia*; neuronal regulation of oligodendrocyte progenitor cells; sensory mechanisms in cuttlefish; regulation of neuronal survival by neurotrophic factors; control of pituitary gonadotrophs and corticotrophs; behavior of cephalopods; spinal cord injury and repair; neural control of eye movements in stingrays and primates; molecular genetics of neuroendocrine control of reproduction in *Aplysia*; characteristics of sexual pheromones in *Aplysia*. Stipend levels are at NIH levels and are in accordance with prior postdoctoral experience. Applicants should send a curriculum vitae and bibliography, the names of three individuals willing to write letters of recommendation, and a statement concerning research interests to: **Wm. D. Willis, Jr., M.D., Ph.D., Program Director, Neuroscience Training Program, Department of Anatomy & Neurosciences and Marine Biomedical Institute, University of Texas Medical Branch, Galveston, TX 77555-1069.** UTMB is an Equal Opportunity/Affirmative Action Employer/Minority/Female/Disabled/Veteran. Minorities and women are encouraged to apply. UTMB hires only individuals authorized to work in the United States.

UNIVERSITY OF MINNESOTA Department of Laboratory Medicine and Pathology

A **POSTDOCTORAL ASSOCIATE POSITION** is available for candidates interested in participating in investigations of protein kinase signaling in response to growth stimuli in the prostate (see e.g., *J. Biol. Chem.*, 269:24615-24620, 1994 for our recent publications). Applicants should have a doctoral degree in an appropriate basic science field and a record of publications. Salary commensurate with background and experience. Please submit curriculum vitae and names of three references to:

**Khalil Ahmed, Ph.D.
Department of Laboratory Medicine and Pathology
Box 609 UMHC
420 Delaware Street S.E.
Minneapolis, MN 55455**

The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL FELLOWSHIPS available immediately at the Center for Advanced Research in Biotechnology (CARB) for (i) a protein crystallographer and (ii) a biochemist/molecular biologist with recent Ph.D.'s to join multidisciplinary team investigating antigen recognition by antibodies and T-cell receptors (TCRs). Projects include: 1) study of antibody specificity by site-directed mutagenesis and phage display and 2) X-ray crystallographic and solution binding studies of recombinant TCRs. Experience in protein crystallization, BIAcore/sedimentation equilibrium/calorimetry, or heterologous protein expression in eukaryotic cells highly desirable. (*Science*, 267:1984, 1995; *Nature*, 374:739, 1995). CARB is a joint research center of the National Institute of Standards and Technology and the University of Maryland. Excellent facilities and opportunities for collaborative studies. Send curriculum vitae and names of three references to: **Dr. Roy Mariuzza, CARB, 9600 Gudelsky Drive, Rockville, MD 20850.**

RESEARCH ASSOCIATE

1) To study neuromuscular development and the effect of the nerve on the expression of muscle specific genes. 2) To study gene therapy and myoblasts commitment using myoblasts as vectors. Applicants should have a Ph.D. in one of the Biological Sciences and research experience with immunocytochemistry or molecular biology; research experience in muscle biology preferred. Reply with curriculum vitae to: **Dr. Marcia Ontell, Department of Cell Biology and Physiology, University of Pittsburgh School of Medicine, 3550 Terrace Street, Pittsburgh, PA 15261.** The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



Agricultural
Research
Service

United States
Department of
Agriculture

The USDA-Agricultural Research Service announces a **RESEARCH ANIMAL SCIENTIST (Ethologist)** permanent position at West Lafayette, Indiana. The incumbent will be located in facilities of Purdue University's Animal Sciences Department and will be responsible for conducting research on animal cognition in the Livestock Behavior Research Unit. The individual will be part of a team assigned to develop indicators of well-being in food-producing animals. Research includes identification of internal states of animal cognition and perception. Ph.D. and ability to work with domestic animals is desirable. Salary range is \$42,641 to \$59,920 per annum based on qualifications and experience. U.S. citizenship is required. For program information, contact: **Dr. J. Morrow-Tesch, telephone: 317-494-8022.** For the vacancy announcement and application procedures, contact: **Janie Carr, telephone: 301-344-4569.** Incomplete applications will not be considered. *ARS is an Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS New York University Medical Center

Two **POSTDOCTORAL TRAINING POSITIONS** are available for studies on the mechanisms of complement inhibition. A background in molecular biology is desirable. Fellows will be supported by an NIH training grant, requiring U.S. citizenship or resident status.

Send applications to: **Dr. S. Tomlinson or Dr. M. B. Whitlow, New York University Medical Center, Department of Pathology, MSB 127, 550 First Avenue, New York, NY 10016.** Minority applicants are encouraged to apply.

Two **RESEARCH SCIENTISTS**-Oceanographers to work in Prince William Sound, Alaska. Expertise in acoustical and optical underwater sensing technologies. Signal and analytical processing knowledge using IDL, AVS, ARCIINFO, and S+ software desired. To apply, send FAX: 907-424-5820 or Email: bird@grizzly.pwssc.gen.ak.us one-page cover letter and curriculum vitae. Open until filled. Questions, Nancy Bird, Prince William Sound Science Center, P.O. Box 705, Cordova, AK 99574. Telephone: 907-424-5800.

RESEARCH ASSOCIATE to teach and conduct research on nuclear cloning in nonhuman primates. Requires: Ph.D. (reproductive biology or physiology), two years of university teaching experience in reproductive physiology, two years of research experience with rodents and nonhuman primate gametes and ten years of experience (may be included in above) in micromanipulation techniques. Specific experience is required in mammalian nuclear transplantation, intracytoplasmic sperm injection, preparation of microtools, embryo biopsy, zona drilling and assisted hatching, *in vitro* maturation and fertilization of mammalian oocytes, embryo cryopreservation, gene transfer and the production of transgenic animals. Independent research success must be demonstrated by publication of research papers in peer-reviewed journals, at least three as primary author. Position requires teaching reproductive physiology and embryo biotechnology to pre- and post-graduate students. Applications will be considered for one month after publication of this advertisement. Send curriculum vitae and names of three references to: **Dr. Don P. Wolf, Oregon Regional Primate Research Center, 505 N.W. 185th Avenue, Beaverton, OR 97006.** Equal Opportunity/Affirmative Action Employer.

ECOLOGICAL RISK ASSESSOR

Sciences International Inc., a dynamic health and environmental sciences consulting company with a mission of applying scientific excellence to real world problems, is seeking an ecological risk assessment expert able to lead site risk assessment activities. This senior-level position requires experience with hazardous waste sites, experience in negotiating with agencies, and design and implementation of field studies. The ideal candidate will have an M.S. or Ph.D. in ecology, limnology or related field; at least five years of experience; and excellent written and oral communication skills. Please mail résumé along with salary requirements to: **1800 Diagonal Road, Suite 500, Alexandria, VA 22314.** Equal Opportunity Employer.

PATHOLOGIST POSITIONS

The Pathology Branch, Environmental Toxicology Program, National Institute of Environmental Health Sciences has opportunities for four permanent positions as Veterinary Medical Officers in several areas of research and testing related to the identification and characterization of chemical and physical environmental agents that have the potential to cause adverse health effects. U.S. citizenship is required. Salary will be commensurate with experience and qualifications. Salary ranges are as follows: (GS-13 \$50,706 - \$65,915; GS-14 \$59,920 - \$77,893; GS-15 \$70,482 - \$91,629).

SENIOR PATHOLOGIST:
GS-14 (Code: HNV106A)
GS-15 (Code: HNV106B)

Research and management of studies to determine toxic and carcinogenic effects of xenobiotics. Experience in rodent carcinogenesis pathology, morphology, immunohistochemistry and molecular biology is preferred. For further information contact: **Dr. Gary A. Boorman, (919) 541-3440, Fax (919) 541-4714, email BOORMAN@NIEHS.NIH.GOV.**

TOXICOLOGICAL PATHOLOGIST:
GS-13 (Code: HNV107A)
GS-14 (Code: HNV107B)

Management of rodent studies, review of morphological diagnoses, determining terminology and criteria for toxic and carcinogenic lesions in B6C3F1 mice and F344 rats. Serves as study director for chemicals under evaluation. For further information contact: **Dr. Rick Hailey, (919) 541-0294, Fax (919) 541-4714, email HAILEY@NIEHS.NIH.GOV.**

TOXICOLOGIST/PATHOLOGIST:
GS-13 (Code: HNV108A)
GS-14 (Code: HNV108B)

Serves as study director for new chemicals, plans studies, develops protocols that will provide meaningful information that can be used in risk assessment. Experience in molecular biology and modeling of chemical effects is preferred. For further information contact: **Dr. Gary A. Boorman, (919) 541-3440, Fax (919) 541-4714, email BOORMAN@NIEHS.NIH.GOV.**

PATHOLOGIST FOR ALTERNATE SPECIES:
GS-13 (Code: HNV109A)
GS-14 (Code: HNV109B)

Management of studies to evaluate chemicals using small fish models. Plans studies that will help reduce the number of rodents needed in chemical evaluations, determines which alternate models may prove most effective. Experience in small fish models and carcinogenicity studies is preferred. For further information, contact: **Dr. Gary A. Boorman, (919) 541-3440, Fax (919) 541-4714, email BOORMAN@NIEHS.NIH.GOV.**

The closing date of this announcement is June 1, 1995. To ensure consideration, send cover letter indicating the position(s), by code number, to:

**Ms. Norma Daye, NIEHS Personnel Office
P. O. Box 12233, Research Triangle Park, NC 27709
(919) 541-3377**

TRUDEAU INSTITUTE, INC.

A POSTDOCTORAL POSITION in IMMUNOLOGY is available for a person with training in cellular and/or molecular immunology to study the immune response to bacterial infections. The laboratory is currently emphasizing immunity to experimental tuberculosis.

THE TRUDEAU INSTITUTE is a well-endowed, not-for-profit, basic research institute with modern facilities, up-to-date equipment, in-house animal production, efficient management and an international reputation for excellence. The Trudeau Institute is located on the shore of Saranac Lake, 8 miles from Lake Placid. Competitive salary and fringe benefits are offered and institute housing will be made available.

Applications consisting of a curriculum vitae and the names and addresses of three references should be addressed to:

**Robert J. North, Ph.D., D.Sc.
Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983**

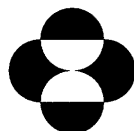
Drug Discovery in Hematopoiesis

Merck Research Laboratories is seeking applicants for two positions in the Hematopoietic Growth Factor Research Group. The group focuses on discovery of compounds with hematoregulatory activity and research on the mode of action of hematoregulatory cytokines.

Senior Research Biologist: To perform research in the signal transduction pathways of hematoregulatory cytokines and to elucidate the mode of action of hematoregulatory compounds. The successful candidate will have a Ph.D. or equivalent degree with at least 2 years of postdoctoral experience and strong research training in Cell Biology and Biochemistry of receptor signal transduction. Experience with cell biology of cytokines on hematopoietic progenitor cell lineages preferred.

Staff Biologist: To perform research in the discovery of hematoregulatory compounds. Research experience with hematopoietic progenitor cell lineages and the ability to identify various progenitor colonies in semi-solid media are essential. The successful candidate will have an M.S. or equivalent degree in biology, or a B.S. degree or equivalent with at least 2 years of experience with clonogenic assays.

Salary, benefits and growth potential for these positions are excellent. The work location is in Rahway, New Jersey, approximately 25 miles from New York City. Please send resume, no later than June 15, with an outline of research interest and names of three references addressed to: **Mr. Ken Weiss, Human Resources, Merck & Co., Inc., P.O. Box 2000, RY80-A-3 (AD #162), Rahway, NJ 07065. EEO/AA/VH Employer.**



MERCK
Research Laboratories

SENIOR RESEARCH FOOD MICROBIOLOGIST

Cargill's Central Research Department, in Minneapolis, is seeking a Microbiologist to lead projects to develop technology for the control of microorganisms in food and feed. Using food microbiology as an enabling technology in the areas of preservation and shelf life, the scientist in this position will participate in the development of new food products. To qualify, you must have a PhD in microbiology, or Food Science with 2 to 5 years experience, post PhD and knowledge of food microbiology and food chemistry, including pathogenic microorganisms in food and feed. Experience in food preservation and interactions of microorganisms with food and feed systems, good oral and written communication and teamwork skills are a must.

SENIOR RESEARCH CHEMIST

We also have an opportunity for a Senior Research Chemist with a PhD in Food Science or Cereal Science and 2-5 years of experience (industry or academic based) to develop new products for our Food Sector using a variety of cereal grains. Applicants must have a knowledge of cereal grains and their application in food as well as an understanding of the chemistry of the interaction of cereal components.

As one of the largest and most diverse agri-business companies in the world, Cargill can provide many opportunities and experiences you may not find with other companies. Career development plays an integral role in the Cargill experience. Effort and expertise are rewarded with highly competitive compensation and excellent benefits. For consideration, please submit your resume, including salary requirements and position of interest, to: Cargill, Inc., Donna Bloom, Human Resources #10, P.O. Box 5697, Minneapolis, MN 55440. Fax (612) 742-7022. No phone calls please.

Equal Opportunity Employer



Executive Director Northeastern Regional Aquaculture Center University of Massachusetts Dartmouth

The Northeastern Regional Aquaculture Center (NRAC) at the University of Massachusetts Dartmouth (UMassD) invites nominations and applications for the position of Executive Director. NRAC is one of five regional aquaculture centers established by the U.S. Congress. It is funded annually by the U.S. Department of Agriculture at annual level of approximately \$750,000. The northeastern region includes 12 states and the District of Columbia. NRAC develops and sponsors cooperative regional research and extension education projects on behalf of the aquaculture industry in the northeastern U.S. NRAC is governed by a Board of Directors which relies heavily on technical and industry advisory committees.

Candidates should have outstanding technical knowledge and successful experience in aquaculture, which may include but not be limited to research, teaching, or commercial experience. Demonstrated administrative and leadership abilities are essential.

A Ph.D. is preferred but exceptional candidates with equivalent experience will be considered. The successful candidate should be qualified to teach graduate and undergraduate courses in aquaculture and advise graduate students. It is particularly important that the Executive Director be able to communicate well with industry, academic, and government representatives in aquaculture and can demonstrate strong leadership in a team-building approach to project development and management. Salary is competitive and will be based on qualifications and experience. Benefits will include health and dental plans, a retirement plan, vacation, and sick leave. The Executive Director will be employed by NRAC and will report jointly to NRAC's Board of Directors and the UMassD Provost and Vice Chancellor for Academic Affairs.

Applications should contain a letter of interest, Curriculum Vitae, and names, titles and phone numbers of three references. Position will be available from August 1, 1995. Review of applications will begin on June 1, 1995 and continue until a successful candidate has been selected. All communications regarding this position should be addressed to:

**NRAC Executive Director Search
Office of Human Resources
University of Massachusetts Dartmouth
285 Old Westport Road
North Dartmouth, MA 02747-2300**

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



Scientist

Terrapin Technologies, a dynamic young organization with proprietary targets in intracellular signaling and a unique drug discovery technology, seeks a T Cell biologist to join its staff. The successful candidate will have experience in all aspects of T cell biology including cell isolation and functional characterization. A Ph.D. and 3 years of postdoctoral experience are required. Qualified scientists should send a letter of application, curriculum vitae, publication list and names of references to **Human Resources/MS, Terrapin Technologies, Inc., 750-H Gateway Blvd., South San Francisco, CA 94080. Terrapin Technologies is an Equal Opportunity/Affirmative Action Employer.**



COMPUTER SYSTEMS MANAGER to support research in structural biology at a state-of-the-art molecular biology research institute. Provide administrative systems user support to maintain operation of CABM computers using UNIX-based operating systems, and assist in planning, design, development and implementation. Applicant should have a college degree, plus 4 years of programming and/or systems administration on mainframes, workstations, or microcomputers. Requires in-depth knowledge of the UNIX system, shell programming and a scientific programming language. Experience with networking, configuring tape and disk drives and other mass storage systems is essential. \$45 to \$61K DOE. Excellent benefits. Send resume to **Pat Jones, Personnel Administrator, Center for Advanced Biotechnology and Medicine, 679 Hoes Lane, Piscataway, NJ 08854.** Or E-Mail: Jones@mbcl.rutgers.edu. Successful candidate must provide employment verification. *Rutgers University is an AA/EO Employer, M/F/H/V.*

GLOBAL CAREER OPPORTUNITIES

DIRECTOR

International Institute for Applied Systems Analysis (IIASA) Laxenburg (Austria)

The Executive Council of the International Institute for Applied Systems Analysis (IIASA) invites nominations and applications for the position of Director. IIASA is an international non-governmental research organization, located in Laxenburg near Vienna (Austria) and supported by seventeen countries. The Director supervises 85 professionals and approximately 100 support staff with an annual budget of \$15 million. He or she plans and oversees a broad range of programs concerned with global environmental change, develops and recommends policies for the execution of research programs, determines the effectiveness of current programs, and develops new and revised programs.

The applicant should be capable of providing an imaginative leadership in developing the potential role of an institution such as IIASA, should have a track record of general management experience in a scientific - preferably international - research institution and should have recognized experience with interdisciplinary research. He or she should have an excellent command of English, the working language of the Institute. Knowledge of at least one other major European language is desirable (preferably Russian or German).

Nominations and applications should be sent to:

Professor K.L. KOMAREK
The Director's Search Committee
IIASA-Schloss Laxenburg
A-2361 Laxenburg
Austria

Applications should be accompanied by a current curriculum vitae, a bibliography, and a cover letter that addresses the qualifications of the position. Salary commensurate with experience. Review of applications will begin on July 1st, 1995.

We have the Authority to explore new directions



Discover the exceptional opportunities, resources and satisfaction waiting for you at The Charlotte-Mecklenburg Hospital Authority. United by a shared commitment to excellence in primary and specialty care, the more than a dozen facilities that make us one of the Southeast's premier healthcare systems offer you the ideal setting for personal and professional growth.

Carolinas Medical Center

is a 843-bed acute care teaching facility and one of the major referral centers in the Southeast.

Emergency Medicine Research Director

Carolinas Medical Center is currently seeking a Director of Emergency Medicine Research for the Department of Emergency Medicine. The Director is responsible for overseeing the development of vigorous basic research projects in cardiovascular physiology, pharmacology and toxicology and assisting in clinical projects designed to advance the scientific foundations of Emergency Medicine. The position will also be responsible for budgetary planning, purchases for the laboratory, capital expense budgeting and supervision of employees in the laboratory. The qualified applicant must have a Ph.D., experience in supervision of a laboratory operation, knowledge of animal care regulations, grant writing and extramural funding and experience in training research fellows, resident physicians and students. Other requirements include expertise in personal computer-based software including statistical packages and experience with physiology, pharmacology and biochemistry techniques. Qualified candidates should submit resume and salary requirements to:

Director, Employment Division
The Charlotte-Mecklenburg Hospital Authority
Doctor's Building, Suite 101
1012 S. Kings Drive • Charlotte, NC 28283

EOE



The Charlotte-Mecklenburg
Hospital Authority

GLOBAL CAREER OPPORTUNITIES



Swiss Federal Institute of Technology-Lausanne
(EPFL)

Applications are invited for the following position
at the Department of Physics:

Assistant professor of Biomedical engineering

The field of research covers especially the characterization of microscopic and macroscopic physical properties of the living matter. The candidate is expected to participate in teaching physics and biomedical engineering courses at the undergraduate and graduate level.

Women candidates are especially encouraged to apply.

Deadline for applications: August 31, 1995

Preferred start date to be discussed.

Interested candidates should ask for the application form to: Présidence de L'Ecole polytechnique fédérale de Lausanne, CE-Ecublens, 1015 Lausanne, Switzerland.



Wellcome Trust Matrix Unit Senior Research Investigator

Applications are invited from biochemists/molecular biologists with an interest in developing eukaryotic cell expression of proteoglycan constructs to investigate the control of proteoglycan biosynthesis and the effects of mutagenesis on proteoglycan matrix functions. The position provides a good opportunity for career development and is within the newly formed Wellcome Trust Cell Matrix Unit as part of the team led by Professor Tim Hardingham investigating the extracellular matrix functions of proteoglycans. The position is available from October 1995 and is funded by the Wellcome Trust for 5 years commencing at a salary in the range £13,941 - £22,622 p.a. (Grade IA or II). Informal enquiries to Professor Tim Hardingham (tel. (44) 161 275 5511, fax. (44) 161 275 5082). Closing date for applications June 30th. Application forms and further particulars available from the Director of Personnel (Academic Staffing), The University, Manchester M13 9PL, U.K. (tel. 0161 275 2028, fax. 0161 273 5306). Quote ref: 144/95.

As an Equal Opportunities Employer, the University welcomes applications from suitably qualified people from all sections of the community regardless of race, religion, gender or disability.

Promoting quality teaching and research.



The University of Groningen The Netherlands

has an opening for a

Professor in Inorganic Solid State Chemistry

(vacancy number: 950502)

at the Laboratory of Chemical Physics, Department of Chemistry.

We are looking for an enthusiastic materials scientist with a proven capability to prepare and study inorganic solid state compounds with interesting physical properties. A strong interest in the fundamental relationship between these properties and the composition and structure of the compounds should be a primary motivation.

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

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

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

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

The appointment carries tenure. The salary will be between Dfl. 7.867,- Dfl. 13.953,- per month, depending on qualifications and personal circumstances.

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

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

SCIENTIST

Expanding Minds

Improving Bodies

Here at Chiron, we are on the leading edge of biotechnology research and scientific advancement, producing an array of therapeutic and diagnostic tools to advance potential cures for cancer and serious infectious diseases. We have the following opportunity:

Scientist

You will both participate in and lead protein formulation and delivery studies. Responsibilities will involve the design of novel protein formulation systems and delivery vehicles for vaccine antigens with immuno adjuvants. A strong protein background, with an emphasis on analytical methodologies and research interests is preferred. Required are a PhD degree in Chemistry, Biochemistry, or Pharmaceutical Chemistry and a minimum of 2-4 years' postdoctoral training/pharmaceutical industry experience in drug delivery. You must be team-oriented, with excellent supervisory skills.

If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume to: Chiron Corporation, Human Resources, Box# 94-390, 4560 Horton Street, Emeryville, CA 94608. We are an equal opportunity employer.



CHIRON

WHERE GREAT CAREERS COME TOGETHER

ciba

Ecological Toxicologist

Ciba Crop Protection, a world leader in agricultural chemicals, is seeking applicants for the position of Ecological Toxicologist in Research & Development, Greensboro, NC. Qualifications include a Ph.D. in ecological toxicology or a closely related environmental field. Appropriately experienced M.S. applicants will be considered. Experience in the conduct of laboratory or field toxicity studies or with government pesticide regulatory agencies or environmental consulting firms engaged in relevant impact studies is desirable. Principal duties include planning and conduct (via contract laboratories and university researchers) of ecotoxicology and ecological exposure studies required for registration of pesticides. Knowledge of risk assessment techniques and exposure analysis or modeling is preferred. Ciba offers a competitive salary and benefits plan. Send resumes to: **Richard Balcomb, Ciba Crop Protection, L-1013, P.O. Box 18300, Greensboro, NC 27419-8300.** We are an equal opportunity employer M/F/H/V.

At Abbott, Pioneering Research Is Making The World A Better Place.

For over a century, breakthrough research has helped Abbott Laboratories deliver generation after generation of highly advanced pharmaceuticals. Today, as a globally renowned health care leader, our world class research team continues to consistently deliver ground breaking products to market. Now you could join us and help bring a new age of drug discovery to life.

Chemical Information Scientist

You will develop and support chemical information systems for application in pharmaceutical products R&D. These systems support combinatorial chemistry, drug sample inventory, chemical modeling and synthetic organic chemistry. You will have broad responsibilities including project leadership, full software life cycle planning, development, maintenance, and support, conformance to federal regulations, chemical database administration and technology evaluation.

We require a PhD in Chemistry or equivalent, at least two years of project leadership experience, and four years of scientific software development background.

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For confidential consideration, please send your resume and salary history to: **Linda DeLavallade, D-393, AP51, Job #69074BE, Abbott Laboratories, 100 Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

ABBOTT LABORATORIES



Quality
Health Care
Worldwide
Since 1888

Experience The Abbott Edge.

Postdoctoral/Research Assistant

Molecular Biology/Biochemistry/Cloning/Receptors

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, has an opening for a Post-doctoral Research Assistant in the Department of Cell Biology.

The qualified candidate will study the expression of Duffy Blood Antigen in nonerythroid organs. The antigen was recently cloned in our laboratory and is a multifunctional membrane glycoprotein. It has been demonstrated to be a novel chemokine receptor, and is known to be the malaria P. vivax receptor in humans and malaria P. knowlesi in simians. It is in the endothelial cells of capillaries and postcapillary venules of several tissues and in epithelial cells of kidney collecting ducts and lung alveoli.

The project is a promising challenge for an independent, highly motivated candidate with a solid background in biochemistry and molecular biology (cloning, receptors, protein structure and cell biology). To be considered, you must be a U.S. citizen or permanent resident, and possess at least 2 years of experience. Salary commensurate with experience; up to 4 years of grant support available.

In close proximity to other major research institutes on Manhattan's Upper East Side, we are comprised of 17 laboratories carrying out autonomous research programs in diverse fields. For immediate consideration, please fax (212)570-3195, or forward C.V. and three references with telephone numbers to: **A. Oscar Pogo MD, Department of Cell Biology, New York Blood Center, 310 East 67th Street, New York, NY 10021.** An Equal Opportunity Employer M/F/D/V

Job Opportunity Hotline 1-800-835-0058

△ Lindsley F. Kimball
Research Institute
A Division of the New York Blood Center

Discover A Unique Approach

Amgen is the world's largest biotechnology company. We currently have career opportunities available at our Boulder, CO facility.

To qualify for the following positions, candidates must have experience in programming using Visual Basic, Pascal, or C for instrument control, interfacing, data acquisition and processing in a UNIX, VMS, Windows and/or Mac OS environment.

SCIENTIFIC PROGRAMMER

We currently seek a scientist/engineer to define the needs of scientific functional areas and implement software solutions through collaboration with vendors and consultants. Candidates must have at least 5 years' experience in computer programming, interfacing, and data processing in a laboratory environment. A BS in Chemistry, Biology, Computer Science, or a related engineering/technical field is also required. (Job Code: OXP-SC-1234)

RESEARCH SCIENTIST – LABORATORY AUTOMATION

This individual will define automation opportunities, implement solutions, and evaluate technology with vendors and consultants. To qualify, candidates must have experience in developing and implementing robotics and automation in a laboratory environment. An advanced degree in Chemistry, Biology, or related engineering/technical field is also required. (Job Code: OXP-SC-5678)

At Amgen, you'll find our approach as rewarding as it is effective. We offer a highly competitive compensation and benefits package. Please mail your resume to: Amgen Boulder, Human Resources Dept., Job Code: (see above), 3200 Walnut Avenue, Boulder, CO 80301. 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.

AMGEN®

Director, National Sea Grant College Program

A Senior Executive Service Position in the Federal Government

Department of Commerce
National Oceanic and Atmospheric Administration (NOAA)
Director, National Sea Grant College Program (NSGCP)
Silver Spring, Maryland
\$97,991 - \$122,040 annually

The candidate selected for this position will work collectively with university and institutional participants to provide leadership to the following academically-based programs:

- National Sea Grant College Program • Regional Marine Research Program
- National Coastal Resources Research and Development Institute

Professional/Technical Qualification Requirements:

- Broad background in research and development in the oceanographic, meteorological, environmental, physical and/or engineering sciences related to environmental research on the oceans, coastal areas and Great Lakes.
- Demonstrated ability and experience in conceiving, designing, directing and evaluating research programs.
- Broad knowledge of current problems, issues and programs in the field of oceanic, atmospheric, social, legal and policy science.
- Administrative experience in a research university environment.

Formal education (e.g., Ph.D., Sc.D., JD) at the post graduate level in oceanography, meteorology, environmental, physical or engineering sciences is desirable.

For a copy of the vacancy announcement and information on
 how to apply for this position, please contact
 Heidi K. Smith on

(301) 713-0530 (ext. 108)

Refer to announcement number NOAA-95-03.
 This vacancy closes on July 7, 1995.



NOAA is an Equal Opportunity Employer

Scientists IGEN, Inc.

IGEN, Inc., an emerging leader in medical diagnostics has immediate opportunities for scientists with the following experience levels:

Biochemists

- Ph.D., M.S., B.S. with experience in: enzymology and protein chemistry, molecular recognition/imprinting, immobilization/chromatography of biomolecules for Gaithersburg, MD. Refer to dept. MM.
- Ph.D. to work on research and development of new materials and devices for biosensing and bioseparations. Experience required in the following areas: biomolecule chromatography, immobilization/surface chemistry, electrochemistry, biosensors for Cambridge, MA. Refer to dept. AF.
- Ph.D. to provide technical and leadership necessary to develop and integrate reagents, device components and protocols for use in disposable devices for Gaithersburg, MD. Refer to dept. GG.

Biologists

- Ph.D. to develop and implement sample treatment and processing methodologies to be used in portable in vitro diagnostic devices. Proficiency in immunochemical procedures and processing of biological fluids required; prior diagnostic industry experience a plus. Refer to dept. POC.
- Ph.D. to explore various assay formats, establish conjugation chemistries and procedures for hapten assays. Requirements: working knowledge of GMP in a Manufacturing environment; project management; and supervisory experience. Refer to dept. RS.
- B.S. to provide technical bench level support necessary to develop analytical methods with basic immunoassay development, protein purification, and conjugate synthesis. Experience in the diagnostics industry a plus. Refer to dept. RS.

To qualify, you should have good communication skills, be highly motivated, and have the ability to work as part of a multi-disciplinary team. Send curriculum vitae, names, addresses, and telephone numbers of three references to: Human Resources, dept. name, IGEN, Inc., 16020 Industrial Drive, Gaithersburg, MD 20877.

IGEN, Inc. is an Equal Opportunity Employer

Science

Gladstone Institute of Virology and Immunology, a modern, well-equipped research laboratory affiliated with University of California at San Francisco is seeking:

Director, Preclinical Antiviral Development

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

To Apply: Send resume and cover letter, including salary requirements, to: Human Resources- V95-15, Gladstone Institutes, P.O. Box 419100, San Francisco, CA 94141-9100.

EOE/M/F/V/D.

Coordinator of Programs for Recruitment and Retention in the Life Sciences College of Biological Sciences University of Minnesota

A position is available to coordinate programs for the recruitment and retention of undergraduate and graduate students in the life sciences, with emphasis on underrepresented groups. The successful candidate should have an advanced degree (MS or Ph.D.) in some area of the life sciences and a commitment to diversity and to education.

The Coordinator of Programs for Recruitment and Retention in the Life Sciences has primary management responsibility for extensive programs designed to provide access to and success in academic life sciences to gifted and talented members of groups presently underrepresented in life sciences. These programs are designed to increase the number of such students who earn graduate and professional degrees in life science disciplines. The Coordinator will work closely with a faculty Director but will report to the Dean of the College of Biological Sciences. The programs, developed in the College of Biological Sciences, include the Math-Science Tutorial program (MST) and the Summer Undergraduate Research (SUR) program. This position is classified in the Professional/Administrative Group, is annually renewable, and 100% time. Salary commensurate with qualifications.

A letter of interest, curriculum vita, and the names and addresses of three references should be sent to Coordinator for Life Sciences Search, 123 Snyder Hall, College of Biological Sciences, 1475 Gortner Avenue, University of Minnesota, St. Paul MN 55108, by June 30, 1995. The University of Minnesota is an equal opportunity educator and employer.

MOLECULAR IMMUNOLOGIST/BIOLOGIST DEPARTMENT OF OBSTETRICS, GYNECOLOGY and REPRODUCTIVE SCIENCES UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE Ph.D. ASSISTANT/ASSOCIATE PROFESSOR

The Division of Reproductive Infectious Diseases and Immunology in the Department of Obstetrics, Gynecology and Reproductive Sciences at the University of Pittsburgh School of Medicine and Magee-Womens Hospital is seeking a creative and productive researcher with experience in molecular techniques to join the faculty in the dynamic environment of the Magee-Womens Research Institute. Evidence of originality, scientific accomplishment and the potential to develop a productive, independent research program is essential. Candidates should have completed at least one post-doctoral fellowship and have or be willing to develop an interest in immune responses to infections of the female reproductive tract. The position will involve the supervision of post-doctoral fellows, technicians and graduate students in the laboratory. Salary and academic rank will be commensurate with experience, training and achievements. Start-up salary and technical support may be provided, if necessary, until independent funding is established.

Send inquiries and curriculum vitae by August 31, 1995, to:

Daniel V. Landers, M.D.
 Director, Division of Reproductive
 Infectious Diseases and Immunology
 Department of Obstetrics Gynecology
 and Reproductive Sciences
 Magee-Womens Hospital
 300 Halket Street
 Pittsburgh, PA 15213-3180

The University of Pittsburgh is an equal opportunity/affirmative action employer.

SENIOR SCIENTIST ANALYTICAL CHEMISTRY

Genentech is seeking a Senior Scientist/Group Leader in Analytical Chemistry with a PhD in Biochemistry, Chemistry or related field and at least 10 years of experience in the pharmaceutical industry. Biotech industry experience would be a plus.

The successful candidate will take responsibility for the characterization of protein therapeutics and should be familiar with a variety of protein characterization techniques such as peptide mapping, mass spectrometry, capillary electrophoresis, HPLC and SDS-PAGE. You will also be responsible for analytical methods development and transfer of these methods to the Quality Control group. Strong oral and written communication skills are required as you will interact with project teams.

Contact us today and learn about our challenges as well as our excellent salary and benefits package for full time employees that includes child care resources, free health club membership, fully paid medical, dental, and vision coverage and an employee stock purchase plan. For immediate consideration, please send your resume to Genentech, Inc., Human Resources Dept. CSJO, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.

Genentech, Inc.

POSTDOCTORAL FELLOW

Analytical/Clinical Chemistry

SAIC Frederick, a Division of Science Applications International Corporation, has an immediate opening in our Chemical Synthesis & Analysis Laboratory (CSAL) at the NCI's Frederick Cancer Research & Development Center, a leading biomedical research facility located in Frederick, Maryland.

The successful candidate will have a PhD in analytical or clinical chemistry with 0-3 years of laboratory experience. Work involves the development of methods for the extraction, separation, and detection of hormonal steroids from biological samples.

You'll work in a campus-like setting near Baltimore, MD and Washington, DC. Plus, SAIC offers a competitive salary and a comprehensive benefits program, including insurances, 401(k) savings plan, and more. Forward CV with 3 letters of reference in confidence to Barbara J. Norton-Gill, Technical Recruiter, **SAIC Frederick**, NCI-FCRDC, P.O. Box B, Frederick, MD 21702. EOE, M/F.

"We value cultural diversity in the workplace".



SAIC Frederick

A Division of Science Applications
International Corporation

AIDS/ Hepatitis R&D



Ortho Diagnostic Systems INC.

Ortho Diagnostic Systems Inc. provides diagnostic reagents and instrument systems to hospital and commercial clinical labs and blood and plasma donor centers. Products include diagnostic systems for coagulation, infectious diseases, immunology and blood banking. We have immediate opportunities in AIDS/Hepatitis R&D for candidates with excellent written/verbal communication skills, computer literacy, and the ability to interact effectively as a member of cross-functional teams.

ASSAY DEVELOPMENT/ PRODUCT TRANSFER

Senior Scientist

A Bachelor's degree is required (an advanced degree preferred) in Biology, Chemistry, Biochemistry, Immunology or related discipline with 10+ years of experience in immunoassay development. The successful candidate must have experience in characterizing rare reagents and developing specifications, knowledge of regulatory requirements for raw material selection, and experience in the transfer of immunoassays into Manufacturing. Excellent knowledge of GMPs is required. (Dept. 294)

Scientist

A Bachelor's degree is required (an advanced degree preferred) in Biology, Chemistry, Biochemistry, Immunology or related discipline with at least 5 years of experience performing/developing automated immunoassays. Familiarity with clinical performance of current HIV and Hepatitis assays is required. Data analysis and excellent computer skills are also required. Responsibilities include the evaluation of prototype immunoassays and automated equipment, identifying and obtaining critical clinical samples and performance panels, and supporting clinical field trials. (Dept. 295)

ELISA MANUFACTURING SUPPORT

Scientist/Senior Scientist

The successful candidate at the Scientist level will have a PhD with at least 3 years of industrial experience, preferably in immunodiagnostics. The Senior Scientist level requires a PhD with 5+ years' of industrial experience, preferably in immunodiagnostics. Experience with ELISA assays and reagent/process validations and product and/or manufacturing support activities is required. Supervisory experience desired. (Dept. 296)

Ours is a smoke-free work place in a campus-like setting ideally located in CENTRAL NEW JERSEY, mid-way between New York City and Philadelphia. We offer competitive salaries and comprehensive benefits including medical/dental insurance, 401(k) plan, and the Johnson & Johnson LIVE FOR LIFE Wellness Program with on-site fitness center.

To apply, please send a copy of your resume suitable for scanning into our database (i.e., clean/clear, no graphics and preferably unfolded) to: Dept # indicated above for the position of your interest, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the work place.

Johnson & Johnson

"Leadership Beyond Compliance"

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES

University of California, Davis

Inquiries are invited from qualified applicants for faculty positions available July 1, 1995.

Positions are 9-month tenure track appointments. Eleven month term employment will be offered and continued based upon academic personnel review.

Assistant Professor specializing in Tropospheric Chemistry. Teach and conduct research in the area of tropospheric chemistry including the investigation of the primary biogeochemical cycles involving the atmosphere and regional scale air pollution chemistry. Apply to: Roger H. Shaw, Dept. of Land, Air, and Water Resources. Open until filled: to ensure consideration applications should be received by 6/30/95.

Assistant Professor specializing in Soil Biogeochemistry. Teach and conduct research on the processes of biogeochemical cycling of nutrients and chemicals in agricultural and native soil ecosystems and the impacts of these processes on ecosystem sustainability. Apply to: Randy A. Dahlgren Dept. of Land, Air, and Water Resources. Open until filled: to ensure consideration applications should be received by 6/30/95.

Assistant Professor specializing in Biological Systems Engineering. This position pertains to development of equipment and processes which integrate engineering and biology at a biochemical or cellular level. A new engineering graduate course, most likely related to tissue culture or biotechnology, will be developed by this person. Apply to: Michael Delwiche, Dept. of Biological and Agricultural Engineering. Open until filled: to ensure consideration applications should be received by 8/25/95.

Assistant Professor specializing in Plant Systematics. Teach at undergraduate and graduate levels. Develop a research program that specializes in the systematics, evolution and taxonomic relationships of horticultural crop species. Applicants should have a Ph.D. in Plant Biology, Botany or the equivalent with training and emphasis on taxonomy, systematics and evolution. Apply to; Fred Bliss, Dept. of Pomology. Open until filled: first consideration date not yet determined.

Assistant Professor specializing in Biochemical Genetics. Conduct research on plant biochemistry and/or biochemical genetics with relevance to agricultural plant production, utilization of quality. Teach undergraduate and/or graduate courses in related topics. Apply to: Richard Michelmore, Dept. of Vegetable Crops. Open until filled: first consideration date not yet determined.

Assistant Professor specializing in Botany/Weed Ecophysiology. Teach an undergraduate course in herbicide physiology. The emphasis would be on relationships between plant ecophysiology and herbicide action, selectivity, how these processes are modified by environmental conditions, and environmental fate of herbicides. There will be opportunity to develop a course along the candidate's area of specialization. Training of graduate students in the general area of weed science will also be expected. Conduct research on ecophysiology of weeds and crops, including interactions with herbicides. Apply to: Dave Bayer, Dept. of Vegetable Crops. Open until filled: first consideration date not yet determined.

Assistant Professor specializing in Food Chemistry. Teach in areas of food chemistry and toxicology. Develop research in analytical/separation methods for food component and toxic substance isolation. Prefer candidate with expertise in analytical chemistry combined with training or experience in oxidant/anti-oxidant chemistry. Apply to: Ericka Barrett, Dept. of Food Science and Technology. Open until filled: to ensure consideration applications should be received by 6/1/95.

Endowed Chair Position specializing in Agricultural Economics. The Department of Agricultural Economics seeks a senior scholar with a distinguished teaching, research, and service record in agricultural economics for appointment as the Daniel Barton DeLoach Endowed Chair in Agricultural Economics. A substantial endowment is provided to support the purpose of the chair, which is to conduct a research and teaching program in agricultural marketing and trade, including transportation of agricultural commodities. Appointment is expected to be at the Full Professor level. Apply to: Richard J. Sexton, Dept. of Agricultural Economics. Open until filled: to ensure consideration applications should be received by 8/15/95.

Professorial positions have responsibilities for teaching, advising and research (in the Agricultural Experiment Station) and require teaching and research experience. Cooperative Extension positions have responsibilities for applied research and outreach. Candidates must have a Ph.D. in an appropriate field. Applicants should submit resume, transcripts (if within five years of graduation), statement of research and teaching experience, list and reprints of publications, and the names and addresses of at least three persons familiar with the applicant's qualifications, to individual and department as noted for position (department name), University of California, Davis, CA 95616.

Please indicate the position(s) in which you are interested. **The University of California is an Affirmative Action/Equal Opportunity Employer.**

Diagnostics Sales

Move into the exciting field of diagnostics sales and step up to a world of opportunity.

Our Diagnostics Group serves the clinical diagnostics market worldwide. Continued introduction of new products has created a need for sales representatives in several U.S. cities. Career paths include sales and product management leading to general management.

We require a B.S. or equivalent in a Life Science (MS, PhD or MBA is a real plus). Successful candidates must be willing to relocate.

For consideration, please send your resume to: Bio-Rad Laboratories, 4000 Alfred Nobel Dr., Dept. 368, Hercules, CA 94547. *EOE MFDV.*

BIO-RAD

Bio-Rad Laboratories

Be at the forefront...

of drug discovery research with The DuPont Merck Pharmaceutical Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals. We have positions open for the following:

Associate/Staff Scientist - Fermentation Biologist

This position is in the protein expression laboratory. Specific tasks center around the production of recombinant proteins derived from insect and mammalian cell lines at the flask to 1-10 liter bioreactor scale. The successful candidate will be an expert in the set-up and operation of suspension cultures, microcarrier cultures, and small scale bioreactor systems. Skills in expressing heterologous proteins in bacteria/yeast are desirable.

BS/MS in Biology or equivalent experience required, along with experience in cell culture methodologies and common molecular biology techniques.

Associate/Staff Scientist - Protein Chemist

Perform *in vitro* and *in vivo* biochemical studies to support the company's drug discovery projects. BS/MS in biological sciences with 2+ years lab experience in analysis and purification of proteins, enzymology, assay development and mammalian cell biology required. Skills and working knowledge of molecular biology, oncology, and signal transduction are a plus.

DuPont Merck offers a competitive salary and generous benefits package including a 401K plan, as well as excellent working conditions and challenging assignments. Please send a letter of introduction and resume, indicating position of interest, to: Human Resources-SD1, The DuPont Merck Pharmaceutical Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer M/F/D/V.

**DU PONT
MERCK**

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

RESEARCH SCIENTIST

Battelle, Pacific Northwest Laboratories (PNL), an expanding multi-program national laboratory, is seeking a Research Scientist to develop, validate, and supervise analyses of biological samples for organic xenobiotics, drugs, or their metabolites in support of toxicokinetic studies. This position will assist in providing interpretation of toxicokinetic study data and provide input into toxicokinetic study designs, proposals, reports, and publications.

Requires a Ph.D. in analytical chemistry, bioanalytical chemistry, or medicinal chemistry, plus a minimum of 3 years relevant work experience. Experience required in organic trace analysis in biological matrices using gas chromatography and high performance liquid chromatography in combination with mass spectrometry, tandem mass spectrometry, and related techniques. Knowledge of mammalian metabolism of organic compounds is also desired. Qualified candidates should send their resume, referencing ad #10-2082-024-PJB/HLS to: Battelle, Pacific Northwest Laboratories, P.O. Box 999, MSIN: K6-21, Richland, WA 99352. Or E-mail to: pnl_employ@pnl.gov or FAX to: (509) 376-9099.

PNL is an Affirmative Action-Equal Opportunity Employer and supports diversity in the workplace. Minorities, Females, the Disabled and Vietnam-era Veterans are encouraged to apply.



Battelle

...Putting Technology To Work

National Institutes of Health / National Center for Research Resources
Veterinary Resources Program

SUPERVISORY GENETICIST (ANIMAL)

The National Center for Research Resources (NCRR) at the National Institutes of Health is currently recruiting for the position of Supervisory Geneticist (Animal), GS-440-14 with a salary range \$60,925 to \$79,200 per year.

The NIH Animal Genetic Resource (NIHAGR) is seeking an individual to serve as Chief of the Resource. The NIHAGR is part of the Veterinary Resources Program, National Center for Research Resources and is located on the Bethesda, MD campus of the National Institutes of Health. The NIHAGR is a unique international resource of genetically and microbiologically defined laboratory rodents and rabbits housed in conventional, barrier, and gnotobiotic facilities. The Resource includes research and service programs in embryo cryopreservation, animal genetics, reproductive physiology, and other areas related to animal model development and usage. The successful candidate will have a strong background in organism genetics and experience in planning, directing, and evaluating the research and program efforts of the Resource.

Applicants must have a degree in genetics; or one of the basic biological sciences that included at least 9 semester hours in genetics. In addition, applicants must have one year of specialized experience at the level of difficulty and responsibility comparable to the next lower grade in the Federal Service. Applicants may apply with a resume, Optional Application for Federal Employment (OF-612), Application for Federal Employment (SF-171) or any other written format you choose. This position is included in the Federal Equal Opportunity Recruitment Program (FEORP) and is therefore targeted for EEO recruitment efforts. Consideration is limited to citizens of the United States. **Applications must be postmarked by June 19, 1995.**

Further information and qualification requirements can be obtained by contacting:

Ms. Rosemary Carter
NATIONAL CENTER FOR RESEARCH RESOURCES
Building 31, Room 3B-38
9000 Rockville Pike
Bethesda, MD 20892
Telephone: 301-496-5621; Fax: 301-402-2110

NIH is an Equal Opportunity Employer

POSITIONS OPEN

RESEARCH

The Henry M. Jackson Foundation for the Advancement of Military Medicine is seeking an individual to perform research with a focus on dopaminergic function in the mammalian cerebral cortex. Duties include planning and execution of electrophysiological and anatomical experiments and presentation of findings in scientific research journals and at scientific meetings. Must possess a Ph.D. or M.D. in related area and three years of laboratory experience. Interested individuals should submit a résumé and cover letter to: **Human Resources Department, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Attn: PL2950060, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. Affirmative Action/Equal Opportunity Employer.**

RESEARCH POSITION CELL MEMBRANE BIOPHYSICS The B. Rappaport Faculty of Medicine Technion—Israel Institute of Technology

Applications are invited for the above position. Please submit curriculum vitae, list of publications, a summary of research interests and goals, and names and addresses of three professional referees to: Prof. Y. Palti, Department of Physiology and Biophysics, B. Rappaport Faculty of Medicine, Technion, P.O. Box 9649, Haifa 31096, Israel. FAX: 972-4-533183.

STUDY DIRECTOR In Vitro Viral Testing Lab

Microbiological Associates (MA) is a rapidly growing international provider of biological and toxicological safety testing services to the pharmaceutical, personal care and biotechnology industries. We seek a qualified individual with a Ph.D. in virology, two to four years of experience SINCE post with *in vitro* virus testing and a minimum of two years of supervisory experience. GLP and/or cGMP experience is desirable. Experience with biosafety testing (FDA "Points To Consider") highly desirable. We seek enthusiastic team players and offer an excellent compensation package including profit sharing and a matching 401(k) program. Forward a résumé with salary history to the Human Resources Department: **Microbiological Associates, 9900 Blackwell Road, Rockville, MD 20850. FAX: 301-738-1036. Equal Opportunity Employer/Minority/Female/Disabled/Veteran.**

MARKETPLACE

ransom hill bioscience, inc.
CUSTOM DNA
FROM \$1.00/BASE!!!
NO SETUP! NO MINIMUM! NO BALONEY!



Fax (800) 597-8509 or
EMAIL visla@delphi.com
for a complete price list!
We cut overhead, not corners!

Circle No. 37 on Readers' Service Card

L - NMMA
N^ω-MONOMETHYL-L-ARGININE MONOACETATE
MG to KG Quantities SUPERIOR QUALITY
100 mg - \$92 • 1 g - \$179 • 10 g - \$890
Inquire about other investigational Nitric Oxide Modulators.
CYCLOPSS BIOCHEMICAL CORPORATION
800-340-9479 • Fax (801) 972-3909
3641 West 1987 South, Salt Lake City, Utah 84104

Circle No. 36 on Readers' Service Card

MARKETPLACE

CUSTOM ANTIBODIES

Antibody Only \$900.00
2 Rabbits, Conjugation & Delivery Included

With Peptide Synthesis \$1200.00
Less Than 10 Residues
Purification, 2 Rabbits, Conjugation & Delivery Included

Advanced ChemTech
Fax(502) 968-1000 1-800-456-1403

Circle No. 13 on Readers' Service Card

CUSTOM DNA SYNTHESIS
PURE & SIMPLE

- Superb Technical Support
- Impeccable Quality
- World's Fastest Service
- Cap Gel & TOF Mass Spec

\$1.19* per base
\$10 setup
50 nmole scale

MIDLAND
STILL THE UNDISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY
Phone 1-800-247-8766 FAX 915-694-2387
email MCRC@WLN.COM

Circle No. 3 on Readers' Service Card

PEPTIDE and DNA
Peptide and DNA engineering specialist:
Phosphoryl, Thiophosphoryl, Biotinyl, Chloromethyl,
Cyclic, Dimeric, Partial protected, FITC, DNP, pNA,
AMC, Phosphothionate and more

IonSpray MS and LC/MS
Synthetic or natural compounds analysis:
Organic, Inorganic, or coordination compounds
Drug metabolites, Enzyme digests, ect.
\$30/sample (MS), \$250/sample (LC/MS)

Call for more information (800-597-7873) or
Fax us sequence for quotation (510-371-1156).
Peptidogenic Research & Co. Livermore, CA.

Circle No. 1 on Readers' Service Card



AMITOF'S CUSTOM DNA
\$1.50 per base/50nmole

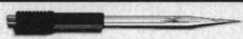
* No set-up Charge / No Rush Charge

* Shipped within 48 hours

1-800-5-AMITOF Fax 617-782-9352

Circle No. 21 on Readers' Service Card

YES WE HAVE NO !!!
Complete systems for In Vivo & In Vitro
measurements of nitric oxide, oxygen,
pH, PCO₂, calcium, potassium, & more!



DIAMOND GENERAL CORP.
3810 Varsity Drive Ann Arbor, Michigan 48108 USA
Telephone (800) 678-9856 or (313) 973 7160 FAX (313)973-0179

Circle No. 32 on Readers' Service Card

MARKETPLACE

World leader in Synthetic DNA and Peptides
E-Mail: Biosyn@aol.com

DNA
• NO SETUP charge • NO minimum order
\$1.49 base • Column Purified
• 10.0 OD's (~330 µg)
• Synthesis Report
• 24 hour SHIPPING
Call for \$1.19 /base oligos. Larger scales & more available.

PEPTIDE
! FREE MASS SPEC !
• NO SETUP charge • Free HPLC Tracing
\$20.00* residue • 15-40 mgs
• 8 - 30 residues
• desalted • Shipped in 5 days
! Antipeptide Antibodies production services, & more !
Since 1984, serving you with quality products
BIO-SYNTHESIS
Tel: 800-227-0627 Fax: 214-420-0442

Circle No. 15 on Readers' Service Card

Human Microvascular Cells
Complete Cell System
NOW ONLY \$350
NEW DEFINED ANIMAL ENDOTHELIAL CELL SYSTEMS:
Porcine Aortic Endothelial Cell System
Bovine Aortic Endothelial Cell System
800-697-1211
cell systems

Circle No. 23 on Readers' Service Card



**EVERYTHING
YOU NEED FOR
PROTEIN
CRYSTAL GROWTH**

Crystallization research products for proteins, peptides & nucleic acids

FREE CATALOG

(800) 452-3899

Fax (909) 784-2215

Internet XTALROX@AOL.COM

**HAMPTON
RESEARCH**

Circle No. 2 on Readers' Service Card

DNA | PEPTIDES

\$.175 /base • **\$.20 /residue**

- Column Purified
- No setup fee
- 15-40 mg in 5 days
- No setup fee

GENEMED BIOTECHNOLOGIES
1 (800) 344-5337 • Fax (415) 952-9540

Circle No. 12 on Readers' Service Card

Express Peptides
15 mg in 5 days
\$18 per residue
Research Genetics, Inc.
1-800-533-4363

Circle No. 5 on Readers' Service Card

NOW THAT
OPERON'S DNA *is*
just **\$1.20** PER BASE,
YOUR *savings* ARE
SURE TO multiply.



Here's something you can bank on. A 50 nmole scale synthesis of Operon's custom DNA for just \$1.20 per base, with a \$10.00 set-up fee.

This new, affordable price not only means you'll be able to conduct more experiments, it means your savings will grow with each project. And with our reputation for high-quality DNA, you'll get the results you need every time.

Of course, we still offer our 0.2 μ mole scale for \$2.00 per base with a \$15.00 set-up fee and our 1.0 μ mole scale for \$2.80 per base with a \$20.00 set-up fee.

Thanks to Operon's knowledgeable and experienced staff, you can always count on us for unmatched customer service, too. Because when it comes to meeting your needs, we really know how to hop to it.

For more information, or to place an order, call us toll-free at **1-800-688-2248**.

OPERON

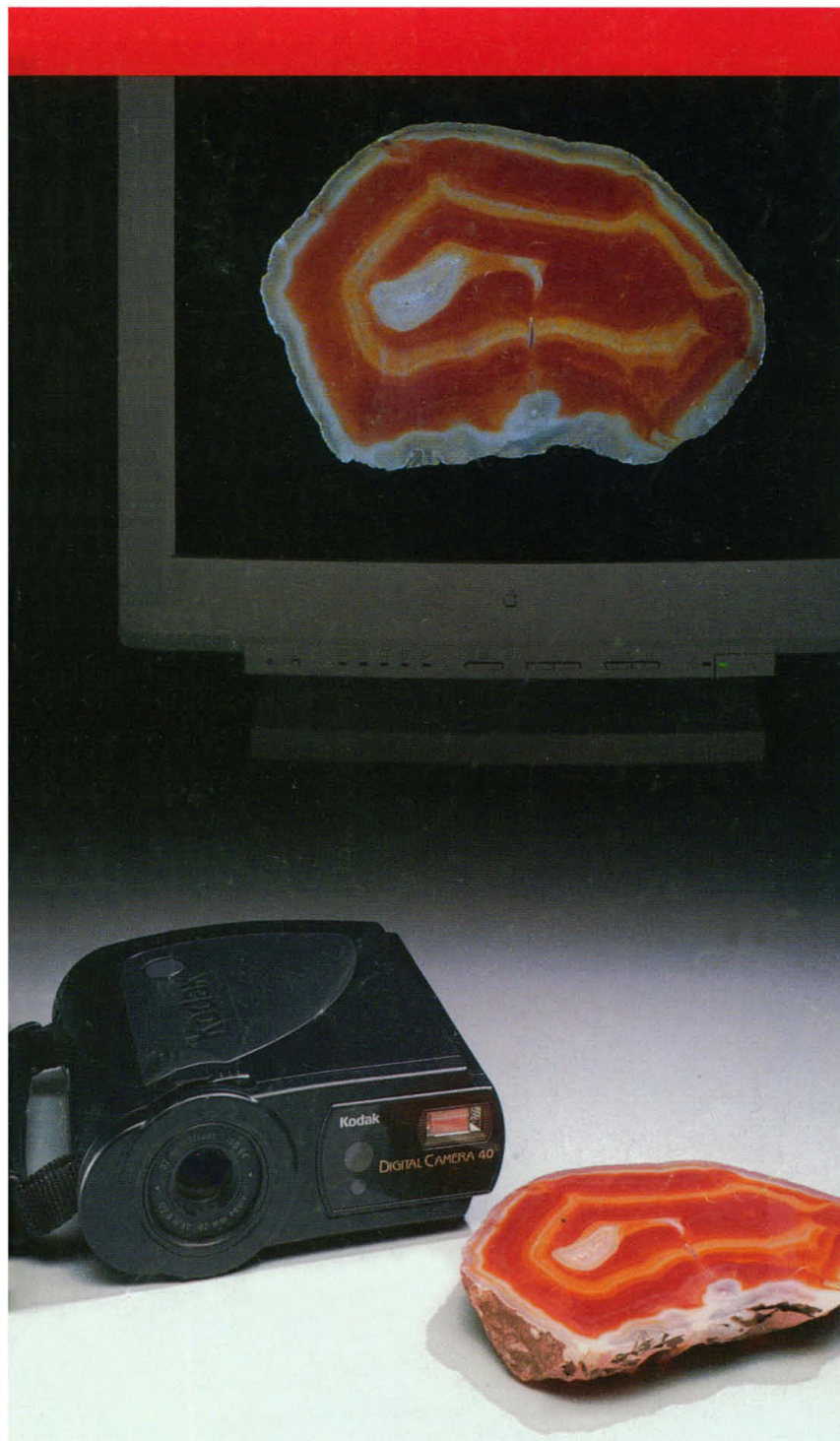
WORLD'S LEADING SUPPLIER OF SYNTHETIC DNA

© 1995 Operon Technologies, Inc. 1000 Atlantic Ave., Alameda, CA 94501, USA. Phone: (800) 688-2248 or (510) 865-8644. Fax: (510) 865-5255. E-mail: dna@operon.com. NIHBP263.00033233.

Circle No. 33 on Readers' Service Card

Maximum Performance for Scientific Imaging

Digital imaging of research results. Fast, Affordable, Kodak.



Kodak's new Scientific Digital Documentation System (SDDS) is the first digital camera system designed for documentation of research results in a wide range of scientific disciplines including Biology, Physical and Materials Science:

- ELISA and TLC plates
- Phenotypic variants
- Reaction flasks
- Fossils and geological samples

Its flexible "point and shoot" format and close-up accessory kit let you photograph samples as close as six inches either in the lab or the field.

Instant Access to Image Files. Obtain instant images without the waste and cost of photography since color images go straight to disk. You no longer wait for processing, reprints or scanning. View and manipulate images immediately. And transfer images to colleagues or documents in seconds.

Full Color Prints at Your Desk. Combine the Kodak SDDS with the Kodak 450GL color printer for instant, high-quality prints right at your desk. And save on print costs since you see images on-screen first, and print only the ones you want.

Put the SDDS to Work for You. Learn how the Kodak SDDS can help improve your scientific documentation and reporting. **Call (800) 225-5352 or (716) 722-5813** for complete product and ordering information.



Lenses and accessories

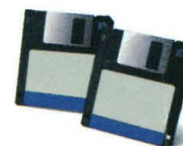


Photo Enhancer software included



Package with printer available



Mac OS



Mac and Windows compatibility

© 1995 EASTMAN KODAK COMPANY



Scientific Imaging Systems

EASTMAN KODAK COMPANY
Rochester, NY 14650

Australia/New Zealand Integrated Sciences Ltd (02) 417 7866 Belgium Sigma-Aldrich N.V./S.A. 0800 14747 / INTEGRA Biosciences AG (01) 830 22 77 Canada InterSciences Inc. (800) 661-6431 or (905) 940-1831
Denmark Struers KEBO Lab A/S (43) 86 87 88 Finland KEBO Lab OY (90) 804 4900 France Sigma-Aldrich Chimie S.a.r.l. 05 21 14 08 / INTEGRA Biosciences S.A.(1) 39 59 84 42 / Kodak-Pathe (film only) 64 61 21 77
Germany Sigma-Aldrich Chemie GmbH 0130 5155 / INTEGRA Biosciences GmbH (06404) 8090 India Biotech India (542) 311473 Israel TAMAR Ltd (02) 52 02 79 Italy Sigma-Aldrich S.r.l. 1678-27018 / M-Medical srl (055) 5001871
Japan Cosmo Bio (03) 5632-9610 / Kodak Japan (film only) 03-5488-2139 / Sigma-Aldrich Japan K.K. 03-5640-8850 Korea LRS Laboratories Inc (02) 924 86 97
Netherlands Sigma-Aldrich N.V./S.A. 06 0224748 / INTEGRA Biosciences AG (01) 830 22 77 Norway KEBO Lab AS (022) 90 00 00 Singapore Research Instruments, Pte. 65-7759228
Spain Quimigrañel s.a. (91) 556 16 14 Sweden KEBO Lab AB (08) 621 34 00 Switzerland Sigma Chemie 155 00 20 / INTEGRA Biosciences AG (01) 830 22 77
Taiwan Long Chain Intl. Co. 886-2-5522605 United Kingdom IBI Limited 01223 24 28 13 / Sigma-Aldrich Co. Ltd. 0800 373731

Circle No. 14 on Readers' Service Card