## PRODUCTS & MATERIALS



## RNA and DNA Calculator

The GeneQuant II RNA/DNA Calculator provides instantaneous results for monitoring the progress of the steps in mapping, cloning, and sequencing. The instrument makes use of measurements with nearest neighbor base sequencing data. The user keys in the ACGT or ACGU base sequencing to obtain instant calculation of oligonucleotide conversion factor, molecular weight, theoretical absorbance, and theoretical  $T_{\rm m}$ . Pharmacia Biotech. Circle 140.

#### **Monoclonal Antibodies**

A new line of monoclonal antibodies (mAbs) to MAP kinase pathway proteins includes antibodies to Raf, MKP-1 (CL100, ERP), MEK1, MEK2, and MEKK. Transduction Laboratories. Circle 141.

A line of T cell receptor mAbs has been expanded to cover 50% of the human V $\beta$  repertoire: V  $\beta$ 2, V $\beta$ 3, V $\beta$ 5.2, V $\beta$ 5.3, V $\beta$ 6.1, V $\beta$ 8, V $\beta$ 13.1, V $\beta$ 13.5, V $\beta$ 14.1, V $\beta$ 16.1, V $\beta$ 17, V $\beta$ 18.1, V $\beta$ 19.1, V $\beta$ 21.6, and V $\beta$ 22.1. Also available are Pan  $\alpha/\beta$ , Pan  $\gamma/\delta$ ,  $\gamma/\delta$  ( $-\delta$ 1), V $\gamma$ 1, V $\gamma$ 9, V $\delta$ 2, and V $\delta$ 3. AMAC. Circle 142.

#### New Filtration Membrane

A new family of filtration products features polyethersulfone (PES) membrane. The PES membrane is an excellent "universal" membrane for use in a variety of tissue culture applications. PES is an inherently hydrophilic membrane that offers faster flow rates, lower extractables, lower protein binding, and better chemical resistance than acetate, nitrate, or

nylon membranes, according to the manufacturer. The unique membrane structure provides some of the fastest flow rates and fluid throughputs of any sterilizing grade filtration membrane. No wetting agents are used so there are no unwanted extractables. Nalge. Circle 143.

## Chemical Illustration Software

A new release of chemEXHIBIT, a desktop publishing tool for technical documentation and illustration, offers more than 50 new drawing and documentation capabilities designed for researchers, scientists, engineers, academics, and students in chemistry. With chemEXHIBIT, chemists can easily draw two-dimensional molecular structure diagrams; display, render, and manipulate three-dimensional structures; label important attributes; create publication-quality illustrations; export and import graphic images to and from third-party software applications; and produce professional-quality page layouts and presentation materials. Molecular Arts. Circle 144.

## Plasmid DNA Purification System

BioPlaz Plasmid DNA purification system provides rapid extraction and purification of plasmid DNA from bacterial cultures. The method is an improved version of the standard alkaline lysis procedure. It does not require organic extractions, columns, overnight ultracentrifugation, or ethanol or propanol precipitation. After the removal of cell debris, protein, and chromosomal DNA by centrifugation, plasmid DNA is bound to a specific DNA binding resin. Resin-bound DNA is

washed with the wash solution to remove residual contaminants. Finally, plasmid DNA is eluted in water or buffer. Approximately 10 to 20 µg of plasmid DNA is recovered from 1.5 ml of bacterial culture pellet in less than 10 min. The recovered plasmid DNA is highly purified and can be used without further manipulation for sequencing, in vitro transcription, restriction digestion, transfection of cells for gene expression, and subcloning. The system can be used to process a large number of samples in a short time using common laboratory supplies and equipment. Biotecx Laboratories. Circle 145.

#### Vacuum Pipettor

The Finnpipette Vacupette is a vacuum pipettor that is especially useful in tissue culturing techniques or where aspirating by



vacuum suction is required. It was designed to replace traditional glass pipettes. It works by attaching a tube from the top of the pipette to a vacuum system. The liquid is aspirated by a disposable tip through the pipettor to a waste container. The Vacupette reduces the risk of contamination

because the laboratory technician does not have to enter or exit the hood once started. Tips are never handled by the technician and are discarded after use. Labsystems. Circle 146.

## Graphics and Analysis Software

GraphPad Prism for Windows is a scientific graphics and analysis program designed to work the way that scientists do. Scientists spend a lot of time analyzing and graphing repeated experiments. With most programs, this means starting fresh with each experiment. With Prism, the user simply enters the new data, clicks once, and Prism instantly graphs and analyzes the next experiment, without the need for complicated batch files or macros. Even though most experiments compare several conditions, other programs require analyzing the data sets one by one. Prism analyzes all related data sets at once, with no need to repeat commands for each set of data. The program requires Windows 3.1 and 3 megabytes of hard disk space. GraphPad Software. Circle 147.

#### Literature

1994 Research Products Catalog features more than 700 products including 115 new antibodies, peptides, probes, proteins, and quantitative enzyme-linked immunosorbent assays. Oncogene Science. Circle 148.

The Separation and Purification of Protein Using Shodex HPLC Columns: A Guide provides 18 pages on information on high-performance liquid chromatography (HPLC). JM Science. Circle 149.

Epicentre Forum is a free bimonthly newsletter that contains technical articles and information on new tools and techniques for molecular and cellular biology. Epicentre Technologies. Circle 150.

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

## Science

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#### **POSITIONS OPEN**

The George Washington University Medical Center (GWUMC) is seeking a PROFESSOR AND CHAIR for the Department of Microbiology and Immunology. The GWUMC seeks a distinguished Ph.D. or M.D./ Ph.D. scientist with an outstanding record of scientific productivity and proven ability to attract external funding in molecular virology with an emphasis on AIDS and Cancer. The Chair will direct the expansion and integration of a program in molecular virology, microbiology and immunology. The Chair will serve as director of the enterdisciplinary Research Center in Molecular Virology and actively recruit additional faculty members. The candidate should be capable of leading the Department to a position of academic excellence and national prominence. The successful candidate will have demonstrated excellence in teaching at the medical, graduate, and postdoctoral levels, as well as leadership qualities and administrative skills necessary to develop an academic interdisciplinary program. Selection process will begin in September 1994 and continue until a successful candidate is identified. The GWUMC is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

Applicants should submit curriculum vitae, an outline of current and future research interests, and names of three references to: Dr. Christie A. Holland, Center for Virology, Immunology and Infectious Disease Research, Children's National Medical Center, 111 Michigan Avenue, N.W., Washington, DC 20010.

CALIFORNIA INSTITUTE OF TECHNOLOGY invites applications for a position as ASSISTANT PROFESSOR of Chemical Physics with an initial applicants may also be considered at the associate or full professor level. Outstanding individuals with a Ph.D. and strong commitment to research and teaching excelence are encouraged to apply. Submit curriculum vitae, publication list, a description of proposed research, and three letters of recommendation to: Professor P. B. Dervan, Chairman, Division of Chemistry and Chemical Engineering, 164-30, California Institute of Technology, Pasadena, CA 91125. The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

Maine Maritime Academy (MMA) seeks to fill the following temporary (possibly permanent) full-time position for the 1995 Academic Year:

#### INSTRUÇTOR/ASSISTANT PROFESSOR OF OCEAN STUDIES

QUALIFICATIONS: Teaching required and elective courses in marine science and chemistry. M.S. degree is required, Ph.D. desired. Teaching experience at the post secondary level is also desirable. Position is open until filled.

Interested persons should send a letter of application and resume to:

#### Director of Human Resources Box C-3 Castine, ME 04420

Letters of application, résumés or any other relevant material not addressed or delivered to the Maine Maritime Academy Human Resource Office will **not** be considered.

MMA is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

#### ENDOWED PROFESSORSHIP IN CARDIOVASCULAR DISEASE TULANE UNIVERSITY

The Cardiology Section of Tulane University is seeking applications and nominations for the position of Professor and holder of the Sidney and Marilyn Lassen Chair in Cardiovascular Disease. Both physicians and scientists with a record of academic excellence in the cardiovascular field commensurate with an endowed academic appointment will be considered. Applicants should send curriculum vitae and 3 letters of reference to: Andrew J. Buda, M.D., Robert Morgandanes Professor of Medicine, Chief, Section of Cardiology, Department of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112–2699. FAX: (504) 587-4237. Affirmative Action/Equal Opportunity Employer. Applications accepted until position filled.

#### **POSITIONS OPEN**

RESEARCH ASSISTANT PROFESSOR Division of Molecular Genetics Department of Environmental Health University of Cincinnati Medical Center Cincinnati. Ohio

(PC083N) Independent research position available July 1, 1994, to establish research program in the area of mammalian mutagenesis. Candidate would be expected to interact with existing programs in mutagenesis and carcinogenesis of the Division of Molecular Genetics and generate full research funding. Candidate must have a Ph.D. in biochemistry and at least 5 years of experience in mutagenesis, specifically in the use of shuttle vector systems and mammalian in vitro DNA replication systems.

Interested candidates should forward a curriculum vitae, a list of publications, a summary of research intersts and three letters of recommendation to: Nancy A. McVay, Department of Environmental Health, University of Cincinnati, PO Box 670056, Cincinnati, OH 45267–0056. Applications must be received by July 29, 1994. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.

#### NEUROBIOLOGIST Department of Anesthesiology University of Maryland School of Medicine

Applications are invited for a tenure-track ASSIST-ANT or ASSOCIATE PROFESSOR position in the Department of Anesthesiology. We offer space, seed money, and a competitive salary commensurate with experience and rank. Candidates with an M.D. and/or Ph.D. are sought with training and research experience in cell and molecular neurobiology with special interest in electrophysiological methods coupled with recombinant DNA techniques. The faculty member will hold a secondary appointment in the Department of Pharmacology and Experimental Therapeutics and will participate in graduate and medical teaching programs. These are excellent institutional programs in molecular and cell biology, membrane biology, and cellular and integrative neuroscience that provide opportunities for collaborative research. Applications accepted through August 15, 1994. Send curriculum vitae, a summary of research experience and goals, and three letters of reference to: M. Jane Matjasko, M.D., Martin Helrich Professor and Chairman, Department of Anesthesiology, University of Maryland, 22 South Greene Street, Baltimore, MD 21201; or Dr. E. X. Albuquerque, Chairman, Department of Pharmacology Experimental Therapeutics, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

#### RESEARCH DIRECTOR

The Department of Anesthesiology, Allegheny. Campus, Medical College of Pennsylvania seeks a director of research. The ideal candidate should be an experienced investigator with demonstrated success in initiating research programs, obtaining extramural funding, and publishing in peer-review journals, and should qualify for an associate professor or professor appointment. An important expectation will be the ability to serve as a mentor to other investigators. Support is available intramurally and a joint appointment with a basic science department is possible. M.D., M.D./Ph.D., and Ph.D. candidates will be considered. Send curriculum vitae to: Glenn P. Gravlee, M.D., Chairman, Department of Anesthesiology, Allegheny Campus, Medical College of Pennsylvania, Pittsburgh, PA 15212. Allegheny General Hospital is an Equal Opportunity Employer.

FACULTY POSITION, MASS SPECTROMETRY IN THE BIOMEDICAL SCIENCES. The Department of Medicinal Chemistry, School of Pharmacy, University of Washington, invites applications for a tenure-track position. We seek an independent investigator involved in the application of mass spectrometry to studies in the Biomedical/Life Sciences. Investigators with an interest in drug metabolism and/or protein analysis are particularly encouraged to apply. The individual will be expected to contribute to Undergraduate and Graduate level teaching. Send curriculum vitae and three letters of recommendation to: Allan E. Rettie Ph.D. Department of Medicinal Chemistry, BG-20, University of Washington, Seattle, WA 98195. The University of Washington is an Equal Opportunity Employer.

# Postdoctoral Opportunities In The Biomedical Sciences.

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

#### Cartilage Biology, Aging, Osteoarthritis Walter E. Horton, Jr., PhD

The regulation of chondrocyte gene expression is being investigated using model systems related to chondrogenesis and cartilage repair. Project will focus on the characterization of chondrocyte nuclear factors that interact with previously identified regulatory sequences in the collagen II gene. Applicants should have training in cellular and molecular biology with an interest in degenerative diseases of aging. Laboratory of Biological Chemistry (OE-49), NIA, Gerontology Research Center, 4940 Eastern Avenue, Baltimore, MD 21224.

#### Biochemistry and Molecular Biology Kuo-Ping Huang, PhD

Protein kinase C isozymes in the control of gene expression and neural function are being investigated. Developmentally regulated neurogranin gene is being used as a model for testing the specificity of the various PKC isozymes in transcriptional control. Phosphorylation of several newly identified PKC substrates is being studied to correlate with the actions of neurotransmitter and growth factor. Applicants should have less than five years postdoctoral experience. Endocrinology and Reproduction Research Branch (OE-49), NICHD, Building 49, Room 6A36.

#### Molecular Biology Jay H. Chung, MD, PhD

Novel strategies are being developed to study how transcriptional enhancers and silencers interact with promotors and replication origins in vivo. Using the chicken  $\beta$ -globin domain insulator as well as matrix attachment regions as models\*, studies are being developed on how domain boundaries are formed and affect transcription. Applicants must have less than five years postdoctoral experience. Molecular Hematology Branch (OE-49), NHLBI, Building 10, Room 7D18.

\*See Chung et al. Cell 74:505-514.

#### Molecular Biology and Gene Therapy Robert M. Kotin, PhD

The human adeno-associated virus (AAV) system as a vector for human gene therapy is being developed. Basic research regarding the mechanism of AAV DNA targeted integration and DNA replication is being investigated with in vitro and in vivo assays. Experience in molecular biology and cell culture is desirable. Molecular Hematology Branch (OE-49), NHLBI, Building 10, Room 7D18.

#### Molecular Cell Biology Edward D. Korn, PhD

Actin-based cell motility is being studied with particular emphasis on the functions of myosin I and II isozymes in non-muscle cells and the regulation of actomyosin activities by heavy chain phosphorylation. Molecular biological approaches to structurefunction questions have high priority. Applicants should have a

strong background in molecular biology and biochemistry and less than five years postdoctoral experience. Laboratory of Cell Biology (OE-49), NHLBI, Building 3, Room B1-22.

#### Molecular Embryology/Morphogenesis Yun-Bo Shi, PhD

The roles of cell-cell and cell-extracellular matrix interactions during organogenesis and tissue remodeling are being investigated. The model system is the metamorphosis of *Xenopus laevis*, which is controlled by thyroid hormone. Current and future studies emphasize the functions of potential morphogens and extracellular matrixmodifying metalloproteinases. Regulation of these genes during development and by thyroid hormone is also being investigated. Laboratory of Molecular Embryology (OE-49), NICHD, Building 18T, Room 101.

#### Molecular Genetics of Herpes Viruses Jeffrey I. Cohen, MD

The functions of varicella-zoster and Epstein-Barr virus genes are being investigated using cosmid systems to construct mutant viruses. Selected viruses are tested in animal models to determine the role of individual genes in virus pathogenesis. Applicants should have experience in virology and molecular biology and less than five years postdoctoral experience. Laboratory of Clinical Investigation (OE-49), NIAID, Building 10, Room 11N228.

#### 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 via modem (1,3014022221 or 1,8003582221) with modem 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 additional opportunities at the NIH, may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov" and port "70". Select Grants and Research Information to reveal the NIH Office of Education directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a ONAL WORK 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.

## Vational Institutes C

9000 Rockville Pike, Bethesda, MD 20892 **Equal Opportunity Employer** 

#### **POSITIONS OPEN**

#### FACULTY POSITION MICROBIOLOGIST

The Department of Biological Science invites applications for a tenure track position as ASSISTANT PROFESSOR starting January or August 1995. Applicants must have a Ph.D. with at least two years postdoctoral experience, a strong commitment to teaching and an active research program using molecular techniques for studies with prokaryotic organisms. The successful candidate will be expected to teach an introductory microbiology course and upper division and Master's level courses in his/her area of expertise, and to develop an active research program that involves undergraduate and graduate students.

Applicants should send a letter of application, curriculum vitae, copies of publications, statements of research and teaching interest and experience, and 3 letters of recommendation to: Microbiology Search Committee, Department of Biological Science, California State University, Fullerton, P.O. Box 34080, Fullerton, CA 92634–9480. Review of applications will begin September 1, 1994, and continue until a suitable candidate is appointed. Affirmative Action/Equal Opportunity Employer.

## The Faculty of Science of the University of Fribourg/Switzerland invites applications for the position of FULL PROFESSOR AND DIRECTOR at the Institute of Physiology.

The candidate should be familiar with current technics in molecular or cell biology. He/she will be expected to carry out research in the field of physiology with the exception of neurophysiology and to assume corresponding teaching duties in German and/or French. The candidate should hold an M.D. degree or its equivalent.

Letters of application including a curriculum vitae, a list of publications with copies of the three most important papers, a short outline of current and projected research interests as well as the names and addresses of three referees should be sent before the end of October 1994 to: Dean of the Faculty Science, University of Fribourg, Chemin du Musée 6A, CH-1700 Fribourg/Switzerland. Telephone: (0041 37) response: (037) 826 275, FAX: 826 584.

#### FACULTY POSITIONS IN BIOCHEMISTRY.

The Ohio State University invites applications for tenured or tenure-track positions in the Department of Medical Biochemistry, College of Medicine. Rank is open. One position is offered in conjunction with the Center for Molecular Environmental Health and will be filled by an individual who has demonstrated research productivity in one or more of the following areas: molecular epidemiology, molecular genetics, molecular medicine or molecular biochemistry. For the other position, area is open. Applicants must have a Ph.D. and/or M.D. degree with postdoctoral training. An ongoing funded research program is also required. Successful candidates will be expected to maintain an independent funded research program and to participate in departmental teaching activities. We offer a competitive salary, benefits package and start-up funds. Send curriculum vitae, a description of research interests, three recent publications and the names of three references to: Dr. Douglas R. Pfeiffer, Chairman Search Committee, The Ohio State University, Department of Medical Biochemistry, 1645 Neil Avenue, Hamilton Hall, 310A, Columbus, OH 43210. Applications will be accepted through August 31, 1994.

The Ohio State University is an Equal Opportunity/ Affirmative Action Employer. Women, minorities, Vietnamera veterans, disabled veterans and individuals with disabilities are encouraged to apply.

#### POSTDOCTORAL POSITION CELL BIOLOGY-MAYO CLINIC

Position available starting January 1995 to study cytoskeletal dynamics in secretory epithelial cells. Experience in biochemical and/or molecular techniques desirable. Applicants should have an M.D. or Ph.D. degree and must be a U.S. citizen or permanent resident. Send résumé and letters of reference: Dr. Mark McNiven, Department of Biochemistry and Molecular Biology, 1721 Guggenheim, Mayo Clinic, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITIONS in industrial biotechnology research and development. Immediate openings for highly creative, broadly trained Ph.D. Molecular Biologists to further investigate the effect of mammalian enhancer-like and origin-like elements in increasing the replication, copy number, and transformation efficiency of plasmid DNA in prokaryotic and eukaryotic cells. Experience in recombinant DNA methodology, vector construction, and plasmid analysis is required. Another research focus is the positive effect of such elements on gene expression and protein synthesis. Additional training in transcription, translation, and protein purification is necessary for this position. Candidates should have demonstrated scientific achievement, strong communication skills, a team orientation, and be highly motivated. Send/FAX: (303-440-0835) curriculum vitae and names of three references to: Director, R&D, 5 Prime 3 Prime, Inc., 5603 Arapahoe Avenue, Boulder, CO 80303–1332.

#### POSTDOCTORAL POSITION EAE RESEARCH

Immediate opening to study experimental allergic encephalomyelitis in mice with emphasis on cellular immunology and molecular biology. Experience in cellular immunology required. Send curriculum vitae and references to: Drs. Whitham/Offner, Neuroimmunology Research 151-D, VA Medical Center, Portland, OR 97221.

POSTDOCTORAL POSITION Harvard Medical School. Available immediately to perform a gene knockout to study the receptor-mediated role of 1,25-dihydroxyvitamin D in development, skeletal homeostasis, intestinal calcium absorption and parathyroid function. Experiments will be undertaken in the Endocrine Unit gene knockout facility. Molecular biology/biochemistry experience required. Send curriculum vitae and names of three references to: Marie Demay, M.D., Endocrine Unit, Wellman 501, Massachusetts General Hospital, Boston, MA 02114. (FAX: 617-726-7543).

POSTDOCTORAL POSITION is available immediately at the Guthrie Research Institute to participate in the molecular characterization of tumor necrosis factor/lymphotoxin receptors and signal transduction processes. Experience in molecular cloning, sequencing, expression and/or background in immunology is required. Send curriculum vitae and 3 reference letters to: Dr. N.-S. Chang, Guthrie Research Institute, 1 Guthrie Square, Sayre, PA 18840. Fax: 717/882-5151. An Equal Opportunity Employer.

POSTDOCTORAL TRAINEE OR RESEARCH ASSOCIATE POSITION available to study hormonal regulation of electrolyte transport in renal cell lines. The study is part of an exciting multi-investigator program in basic hypertension research. Major techniques: electrophysiology, imaging of fluorescent probes. Requirements: Evidence of relevant research experience (i.e., biochemistry, cell culture, computing, transport) as documented by publications in high impact journals. Send curriculum vitae to: Dr. Hopfer, Department of Physiology and Biophysics, CWRU, Cleveland, OH 44106–4970; E-mail: uxh@po.cwru.edu. CWRU is an Equal Opportunity Employer.

#### POSTDOCTORAL FELLOWSHIPS IN AGING RESEARCH

The Nutritional Gerontology Training Program of The University of Texas Health Science Center at San Antonio invites applicants for NIH postdoctoral fellowships. The program centers on basic research in gerontology with emphasis on nutritional manipulation of the aging process. Applicants should hold a Ph.D. or equivalent degree. The annual stipend of up to \$25,000 is limited to U.S. citizens and permanent residents. Send complete curriculum vitae, letter of interest indicating areas of research interest, and names of three references

Dr. Byung P. Yu
Department of Physiology
The University of Texas Health Science Center
7703 Floyd Curl Drive
Antonio, TX 78284–7756

The University of Texas Health Science Center at San Antonio is an Equal Opportunity Employment/Affirmative Action Employer.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION to study mechanisms of rearrangement of the mammalian genome, including the analysis of genes/factors promoting DNA recombination and telomere instability, and the study of the human genetic disease ataxia-telangiectasia. Applicants must be US citizens or permanent residents. Send résumé to: Dr. John Murnane, Laboratory of Radiobiology and Environmental Health, University of California, San Francisco, CA 94143–0750. Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION CARDIOVASCULAR PHYSIOLOGY

Position available for a Ph.D. in cardiovascular research. Experience in muscle physiology, biochemistry, molecular biology, fluorescence spectroscopy are preferred. Women and minorities are encouraged to apply. Send curriculum vitae, three references to: Dr. Judith K. Gwathmey, CVD, Harvard Medical School, Bldg. Bl, Room 146, 220 Longwood Ave., Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL AND MASSACHUSETTS GENERAL HOSPITAL

Two postdoctoral positions are available to continue work on the identification of major control genes in phagocyte development and maturation. All applicants should have a strong background in molecular biology. Preference for one position will be given to an applicant with a background in yeast genetics and familiarity with two hybrid cloning systems. Preference for the second position is for a candidate with a background in RNA biochemistry or in vector development and usage in transgenic animals. Please send curriculum vitae and 3 references to: Dr. Roy J. Soberman, Massachusetts General Hospital East, Room 8306, 149 13th St., Charleston, MA 02124.

POSTDOCTORAL POSITION available immediately to study molecular biology and glycobiology of human thyroid carcinoma. Candidate must have a Ph.D. with extensive skills in molecular biology. Competitive salary. Send curriculum vitae and names and addresses of three references to: Dr. Kenneth B. Ain, Department of Internal Medicine, University of Kentucky Medical Center, Room MN520, 800 Rose Street, Lexington KY 40536–0084. (FAX: 606-323-5707). Equal Opportunity/Affirmative Action Employer.

#### BIOLOGICAL SCIENCES POSTDOCTORAL FELLOW THE UNIVERSITY OF CHICAGO

The Biological Sciences Collegiate Division at The University of Chicago wishes to recruit a POSTDOGTORAL TEACHING FELLOW in evolutionary biology. The fellow will spend half time teaching and half time carrying out postdoctoral research under the supervision of a faculty member in the Department of Ecology & Evolution. Initial appointment will be for one year with an option for renewal. In the first year, the fellow's teaching responsibilities will be to assist faculty in the laboratory teaching of evolutionary biology to undergraduate biology majors. In the second year, the fellow will also be expected to participate in teaching biology to non-majors. Applicants should have a Ph.D. in the biological sciences. Salary will be commensurate with experience. Applicants should submit curriculum vitae, statement of research and teaching experience and interests, names of three references and name of a prospective University of Chicago research sponsor to: Dr. Robert Perlman, Biological Sciences Collegiate Division, The University of Chicago, 1L 60637–5415. Application deadline: 31 August 1994. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

STAFF ASSOCIATE needed by Stroke Center at Columbia–Presbyterian Medical Center to assist in NIH-funded research project. Background in computer science and data management required. Responsibilities include computer programming; statistical analysis; and report preparation. Inquiries with curriculum vitae to: Dr. J. P. Mohr, Director, Stroke Center, The Neurological Institute, 710 West 168th St., New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.



# Public Announcement Regarding an Industrial Science and Technology Frontier Program on "Synergy Ceramics"

Announced by the New Energy and Industrial Technology Development Organization on July 7, 1994

In order to promote the research and development of industrial technology, the New Energy and Industrial Technology Development Organization (NEDO) would like to inform all interested companies and research organization regarding the research and development project described below. This new project is being undertaken as part of Industrial Science and Technology Frontier Program of the Agency of Industrial Science and Technology, Ministry of International Trade and Industry of Japan.

#### Theme of the Research and Development Project

"Synergy Ceramics"

#### Outline of the Research and Development Work to be Entrusted

The purpose of this project is to develop technology for advanced control of structural elements of ceramics materials which is able to simultaneously give conflicting properties and various functions, and to develop, by using such technology, technology for manufacturing ceramics materials with innovative properties so that ceramics materials can be used to meet a broader and higher level of needs in social and industrial areas.

#### **Procedures for Application**

#### (1) Qualification Criteria

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

- 1. The applicant must be company or organization having human resources who are experienced and well qualified to carry out the research and development in the field covered by or related to the project.
- 2. The applicant must be in sound financial condition and have the ability to manage its finances as necessary, to fully carry out the project work.
- 3. The applicant must be able to comply with NEDO's instructions, if such are necessary, to fully carry out the project work.
- 4. The applicant must have attended the explanatory meeting held by NEDO as set forth in item (2) below or been represented at the meeting by a responsible agent or representative who is capable of accurately conveying the contents of the meeting in detail.

#### (2) Explanatory meeting

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

Date: Thursday, July 21, 1994

Time: 14:00 to 15:00 Place: NEDO's Head Office

30th Floor, Sunshine 60 Building 1-1, Higashi–Ikebukuro 3–Chome

Toshima-Ku, Tokyo 170

#### (3) Further Information

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

New Energy and Industrial Technology

Development Organization Contract Division

Accounting Department 28th Floor, Sunshine 60 Building

1-1, Higashi-Ikebukuro 3-Chome

Toshima-Ku, Tokyo 170 Telefax: 03-5992-1184

#### Acrobiology Research ate Research Scientist

Cancer & Infectious Diseases Unit, Upjohn aboratories Discovery Research, has an opportunity available for a microbial physiologist. The successful candidate will participate in infectious diseases research programs studying the role of bacterial metabolic pathways in disease pathogenesis and evaluating new targets for chemotherapeutic intervention. The position will involve the use of molecular biology, biochemistry and microbiology skills for the study of bacterial metabolic pathways and the development of mechanism-based screens for the discovery of novel antibiotics.

We seek an individual with a B.S. or M.S. degree and a minimum of two years laboratory experience. Preference will be given to individuals with laboratory experience in studying the molecular biology of pathogenic bacteria.

Upjohn offers a stimulating, multi-disciplinary research environment at our headquarters in Kalamazoo (a southwestern Michigan community located midway between Detroit and Chicago). An excellent salary and benefits package is provided. For confidential consideration please send your resume to: The Upjohn Company, Corporate Recruiting, Ad #210, 7000 Portage Road, Kalamazoo, Michigan 4900 L. We are an Equal Opportunity Employer with a commitment to workplace diversity.



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#### science departments within the School of Medicine. It is particularly noted for its strengths in the areas of quantitative structural biology and membrane biophysics. The department has a well-established and strong graduate program, and participates in the education of medical students as well as in a combined M.D./Ph.D. program. The University of Virginia has an outstanding research reputation and is in the process of expanding each of the basic science departments in

University of Virginia School of Medicine

Chairperson, Department of Biochemistry

Biochemistry. The Department of Biochemistry is one of five basic

The University of Virginia School of Medicine invites applications and nominations for chairperson of the Department of

the School of Medicine. An exceptional recruitment package is available, including new tenure-track positions, and expanded departmental space in a new research building.

Candidates for this position should have a Ph.D. and/or M.D. degree, a distinguished record of scholarly activity, an internationally recognized research program, the ability to administer a comprehensive academic program, and proven leadership skills. Applications are encouraged from outstanding scientists in a wide range of disciplines, including biochemistry, biophysics, molecular biology, cell biology, structural biology, or molecular regulation of gene expression. The University of Virginia is noted for its strengths in the areas of signal transduction and protein structure, and we hope to attract an individual who will complement and/or enhance these two areas of strength.

Interested individuals should submit a letter of application, curriculum vitae, a research summary, and three references to Gary K. Owens, Ph.D., Chair, Search Committee, Dept. of Molecular Physiology and Biological Physics, University of Virginia School of Medicine, Box 449, Charlottesville, VA 22908.

The University of Virginia is an affirmative action/equal opportunity employer. Women and under-represented minorities are encouraged to apply.

## **Research Scientists**

Gillette Research Institute, a division of The Gillette Company, seeks two Research Scientists to be involved in research leading to the development of new personal care products for Gillette. For one position, candidates must possess a Ph.D. in biochemistry, skin immunology or physiology with at least 5 years of experience in academics or industry. Experience in human skin research is desirable.

For the other position, candidates must possess a Ph.D. in biology, immunology or physiology and the ability to interpret and present data.

Located in a facility outside of Washington, D.C., the Institute is located near a wide variety of government, private and academic scientific laboratories. We offer an excellent compensation and benefits package. Qualified candidates should forward a resume to:



Gillette Research Institute **Human Resources Department 401 Professional Drive** Gaithersburg, MD 20879

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#### CHIEF, CLINICAL PHARMACOLOGY BRANCH NATIONAL CANCER INSTITUTE

The Clinical Oncology Program, National Cancer Institute (NCI), National Institutes of Health (NIH), Public Health Service, is seeking applications for the position of Chief, Clinical Pharmacology Branch, at the Clinical Center in Bethesda, Maryland. The Branch is an integrated clinical and laboratory program in cancer medicine. The laboratories, consisting of 5000 square feet of space, support four senior research investigators. In addition, the Branch has access to NCI's inpatient wards and outpatient clinics at the NIH Clinical Center for translation clinical research in cancer medicine. This Branch has been a leader in the development of new agents and new approaches for cancer treatment. The Clinical Pharmacology Branch is also an integral part of the NCI training programs in both medical and radiation oncology.

We are seeking a senior clinical scientist who is at the forefront of research in the molecular and cellular biology of cancer. U.S. citizenship is required. Salary range is \$71,049-\$491,029. Payment of travel and transportation expenses will be considered on an individual basis. Exceptional recruiting difficulty may result in payment of a recruitment or relocation bonus. Application for Federal Employment (SF-171) must be received or postmarked by August 29, 1994. For application information, please contact Patrick Miller, Personnel Management Specialist, NCI, on (301) 496-1771.

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Requires a PhD in Biochemistry or a related field with 2-5 years' postdoctoral experience in protein chemistry. Experience in areas of biology such as hematopoiesis, inflammation, neurobiology or receptor biology/signal transduction is desirable. (Job Code: OA-SC-KL-001)

#### RECOVERY PROCESS DEVELOPMENT

Requires a PhD with experience in cloning into alternative expression systems for production of functional, soluble recombinant proteins. (Job Code: OA-SC-MM-002)

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PROFESSOR OF BIOLOGY, LEVEL E, BIOCHEMISTRY & MO-LECULAR BIOLOGY, DIVISION OF BIOCHEMISTRY AND MO-LECULAR BIOLOGY, FACULTY OF SCIENCE, THE AUSTRA-LIAN NATIONAL UNIVERSITY. The University invites applications for a position of Professor in the Division of Biochemistry and Molecular Biology, School of Life Sciences, Faculty of Science. The Division is responsible for the teaching of undergraduate students in Biochemistry, Molecular Biology, Microbiology, Cell Biology and Parasitology, and shares the responsibility for Genetics with the Division of Botany and Zoology. The Division is active in the education of graduate students through the Graduate Program in Biochemistry and Molecular Biology, which it administers, and through associations with the Programs in Plant Science and Medical Science. Members of the Division have research interests in the biochemistry and molecular biology of a broad range of organisms. Fields of research include aspects of bacteriology, virology, plant molecular biology, parasitology, insect molecular biology and metabolic regulation. The Division has close links with the Cooperative Research Centres for Plant Science and Biological Control of Vertebrate Pests. Applicants should have a record of achievement in molecular biology and will be expected to offer leadership and administrative skills in the maintenance of the Division's strong record in research, teaching and professional activities. The appointee will take over the Headship of the Division on appointment, in the first instance for a period of five years. Enquiries: Professor C Bryant, Head, Division of Biochemistry and Molecular Biology, telephone 61 6 249 2284, email Chris.Bryant@anu.edu.au Further Particulars and the selection criteria are available from the Secretary, telephone 61 6 249 4566, fax 61 6 249 5011. Appointment: to retiring age. Salary: A\$78,991 per annum. Closing Date: 12 August 1994. Ref. FS 15.6.1. APPLICATIONS addressing the selection criteria should be submitted in duplicate to the Secretary, The Australian National University, Canberra ACT 0200 Australia, quoting the reference number and including curriculum vitae, list of publications and names and addresses of at least three referees. The University has a 'no smoking' policy in all buildings and vehicles. THE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER.



#### MEDICAL RESEARCH COUNCIL

Laboratory of Molecular Biology, Cambridge

#### **TENURE TRACK POSITION IN NEUROBIOLOGY**

Applications are invited from independent scientists to develop a programme of basic molecular and cellular research in the Division of Neurobiology.

Topics of particular interest are biochemical and electrophysiological studies of membrane receptors and ion channels, formation of synaptic connections, and molecular mechanisms of learning and memory, but applications in other areas are also encouraged.

Successful applicants will be able to interact closely with staff in other Divisions of the Laboratory of Molecular Biology. Research in the Laboratory centres around a variety of topical and long-term projects that explore the structures of proteins, nucleic acids, membranes and organelles, and are aimed at understanding cellular and developmental processes at the molecular level. An excellent range of cell culture and biochemical facilities, shared instrumentation and workshops is available.

Salary will be at an appropriate point on the MRC Non-Clinical Scientific scale. Further information can be obtained from Dr Nigel Unwin (0223) 402492.

Applications, including CV, a brief description of interests and the names and addresses of two professional referees should be sent as soon as possible, quoting reference TT/NU to:

> Dr Rosie Ward Personnel Manager MRC Centre Hills Road Cambridge CB2 2QH, UK

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#### DEPARTMENT OF BIOLOGY FACULTY POSITIONS THE UNIVERSITY OF CALIFORNIA, SAN DIEGO

UCSD Biology has 48 full time faculty, spanning broad areas of research from population ecology to transcriptional regulation, with one of the largest and most diverse graduate programs in the country. With substantial commitment from the UCSD Administration, the Department is expanding and strengthening numerous aspects of its exciting program, in particular but not restricted to Neuroscience, Molecular, Cell and Developmental Biology. It invites applications and nominations for two senior and three junior faculty positions.

- 1) The Stephen W. Kuffler endowed Professorship in biology. The candidate must be an eminent scientist and a recognized leader in biological research related to the nervous system, with proven ability as a scholar and teacher. Search Committee Chair: Nicholas C. Spitzer.
- 2) An Associate or Full Professorship in Developmental, Cell, or Molecular Biology. The candidate must be a prominent scientist in one or more of these or related areas, broadly defined, and have proven ability as a scholar and teacher. Search Committee Chair: Michael Levine.
- 3) An Assistant Professorial position in Mammalian Molecular Genetics. Exceptional candidates pursuing genetic approaches to any areas of mammalian biology are encouraged to apply. Of particular interest will be candidates with established expertise in the development of mouse genetic models. Search Committee Chair: Jean Y. Wang.
- 4) An Assistant Professorial position in Cell Biology. Exceptional candidates pursuing innovative approaches to any fundamental problem in cell biology are sought. Search Committee Chair: John W. Newport.
- 5) An Assistant Professorial position in Developmental Biology. Exceptional candidates pursuing imaginative approaches to any basic problem in developmental biology are encouraged to apply. Search Committee Chair: Richard A. Firtel.

Applications for these positions should be submitted before October 1st, 1994. For the senior positions, please send curriculum vitae and bibliography to Ms. Carrie Garnett; Department of Biology, 0346; University of California, San Diego; 9500 Gilman Drive; La Jolla, California 92093-0346. For the junior positions please submit curriculum vitae, bibliography, statement of professional goals and research interests, and the names of three references to Ms. Mary Sue Webb (Mammalian Molecular Biology) or to Ms. Diane Ingalls (Cell Biology and Developmental Biology) at the same address. Indicate the name(s) of the appropriate Search Committee Chair(s) on the envelope. Salaries will be commensurate with stature and based on the UC scale. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

#### THE UNIVERSITY OF IOWA

## Ion Channel Biophysics & Molecular Biology Postdoctoral Research Opportunities

Postdoctoral research opportunities are available in the Department of Physiology and Biophysics at the University of Iowa to study the biophysical and molecular mechanisms of ion channel function and roles in disease. Applicants should have a Ph.D. and a strong background in either molecular biology, cell biology or electrophysiology. For prompt consideration, send letter of application, curriculum vitae, reprints and names of three references.

Brett Adams — Molecular structures and physiological functions of voltage-gated Ca<sup>2+</sup> channels; mechanisms of Ca<sup>2+</sup> channel modulation. (brett-adams@uiowa.edu FAX: 319-335-7330).

**Kevin Campbell** — Molecular studies of EC coupling and Ca<sup>2</sup>+ channel regulation by  $\alpha_2$  and  $\beta$  subunits using biophysical and biochemical approaches (kevin-campbell@uiowa.edu FAX: 319-335-6957).

**Toshinori Hoshi** — Biophysical and molecular mechanisms of voltage-gated K+ channel function; K+ channel regulation by intracellular factors (toshinori-hoshi@uiowa.edu FAX: 319-335-7330).

Erwin Shibata — Mechanisms of cardiac and vascular smooth muscle ion channel regulation (erwin-shibata@uiowa.edu FAX: 319-335-7330).

Michael Welsh — Structure, function and cell biology of CFTR Clchannels, Na+ channels (ENaC), and channels controlling temporal and spatial aspects of Ca<sup>2</sup>+ signalling (FAX: 319-335-7623).

> Department of Physiology and Biophysics The University of Iowa College of Medicine Iowa City, IA 52242

lowa City is a safe and affordable college community with many cultural amenities, and is within easy driving distance of Chicago, St. Louis, and Minneapolis/St. Paul.

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Applications of several excellent post-doctoral researchers are invited for the NIRIM COE (Center of Excellence) Research Fellowship in FY1995. Applicants are requested to join the COE Project in NIRIM, where search for and synthesis of new denser materials are carried out by using ultra high pressure techniques of a diamond anvil cell with laser heating system, a single and a double stage gun-type shock compression apparatus, and a large belt-type apparatus. Applicants must provide a well defined research proposal to be carried out within these scopes. The fellowships will be awarded for a period between August 1995 and March 1996. Salary is about \$3000/m. A round trip flight ticket and a fixed moving allowance will be provided. Application forms (returnable by Sept. 30, 1994) and further particulars can be obtained from:

COE Secretariat, National Institute for Research in Inorganic Materials, 1-1 Namiki, Tsukuba, Ibaraki 305, **JAPAN**.

Tel: +81-298-51-3351 Fax: +81-298-52-7449 e-mail: yamaoka@nirim.go.jp

#### **BS/MS CAREERS**

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26 August 1994

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26 August 1994 issue. You'll reach over 159,000 regular subscribers as well as get special bonus distribution to science students at the top 70 colleges and universities\* around the U.S. when your ad is seen in the special reprint of the B.S./M.S. advertising section. Plus, the reprint will also be distributed to attendees at 9 college career fairs.

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The SCIENCE recruitment advertising staff makes your advertising placement easy! Call Janis Crowley at (212) 496-7704, or fax (202) 682-0816 for more information. In Europe call (44) 0223 302067, or fax to (44) 0223 302068.

Advertising Deadline: 9 August 1994.

## Science

\*The nation's top schools for Biological Sciences, various Chemistry disciplines and Clinical Medicine ranked by the Institute for Scientific Information's Science Watch, as well as the top 20 schools from U.S. News and World Report's annual America's Best Colleges issue.

## DIRECTOR, NATIONAL INSTITUTE OF NURSING RESEARCH, NATIONAL INSTITUTES OF HEALTH

The National Institute of Nursing Research (NINR) is seeking applicants for the position of Director, National Institute of Nursing Research. This position is located in Bethesda, Maryland, and is a permanent full-time Senior Executive Service position with a salary range of \$92,900 to \$115,700 (plus 4.23% locality pay) per annum commensurate with qualifications.

A recruitment bonus of up to 25 percent of base pay may be available to a non-federal selectee for this position, subject to individual approval.

A relocation bonus of up to 25 percent of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval.

A one year probationary period must be served by the individual selected if not currently or previously in the Senior Executive Service.

The Director, NINR is responsible for providing leadership, development and analysis of policy issues in the operation, resource allocation, planning and evaluation of the Institute. The Director, NINR is also responsible for developing and recommending objectives for the Institute to guide grant and contract supported research into areas that are productive, significant and supportive of national health priorities. Applicants for this Senior Executive Service position must have a strong nursing background as well as a Ph.D. in one of the health sciences (or its equivalent). Send applications to Ms. Pathenia Wiggins, National Institutes of Health, National institute of Nursing Research (NINR), 9000 Rockville Pike, Building 31, Room 5B06, Bethesda, MD 20892. For application forms and a copy of the requirements contact Ms. Wiggins at NINR on (301) 496-1524. Deadline for applications is August 1, 1994.

Public Health Service Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

The NIH is an Equal Opportunity Employer.

#### **Economist**

for the

Project on Technical Assistance for the Dissemination and Evaluation of Genetically Improved Tilapia Species in Asia



The International Center for Living Aquatic Resources Management (ICLARM) is a nonprofit international organization conducting research related to fisheries and aquaculture in tropical developing countries. It is a member of the Consultative Group on International Agricultural Research.

The position is based at headquarters in Manila, Philippines, with occasional travel to selected Asian countries. Responsibilities include: a) planning for the implementation of the project; b) review of current status and role of commercial tilapia production in rural economic development in five countries; c) assessment of economic performance of improved tilapia breeds; d) assessment of existing infrastructure and facilities for distribution of improved fish breeds; e) provision of technical guidance and training and supervision of research; and f) preparation of project progress and final reports. This will be a 2.0 to 2.5 year appointment.

The appointee will have a Ph.D. in fisheries economics, resources/agricultural economics or its equivalent; at least five years experience, with extensive field work in developing countries; computer proficiency; excellent interpersonal and communication skills with crosscultural sensitivity; and fluency in English. ICLARM welcomes applications from female candidates.

ICLARM wishes to fill this position by 20 September 1994. Salary and benefits are competitive with those offered by similar international research organizations. Applicants are invited to send their curriculum vitae, date of availability, names and addresses of three (3) references (including telephone, telex, or fax numbers) and copies of relevant publications to: Director General, ICLARM, MCPO Box 2631, 0718 Makati, Metro Manila, Philippines. Fax (63-2) 816-3183.

Applications should be received before 15 August 1994.

## **Molecular/Cell Biology Research**

PARKE-DAVIS Research Division has an excellent research opportunity for an Assistant Scientist, Associate Scientist, or Scientist to work on molecular aspects of gene expression during the inflammatory response. The position is located in the Department of Immunopathology at PARKE-DAVIS' research facility in Ann Arbor, Michigan.

The candidate will play a key role in a wide-ranging, interdepartmental research group studying molecular mechanisms of cell adhesion and activation. Prospective projects

- structure-function analysis of adhesion molecules
- cloning/characterization of genes involved in modulating adhesion molecule expression
- characterization of genes involved in intracellular signalling pathways

Successful applicant will have expertise in one of the following areas: adhesion molecules, transcriptional regulation, cellular activation, or signal transduction.

Requirements: Experience in molecular biology is essential. Experience in advanced cell biology/molecular techniques such as PCR, DNA sequencing, construct generation, eukaryotic expression systems and methods, bacterial expression systems, purification of bacterial fusion proteins, and gene synthesis is desirable.

- Associate Scientist-BA/BS + 3-5 years' experience; MA/MS + 0-2 years' experience Sr. Associate Scientist-BA/BS + 5-7 years' experience; MA/MS + 2-4 years' experience
- Scientist-BA/BS + 7-10 years' experience; MA/MS + 4-7 years' experience

PARKE-DAVIS offers an excellent compensation program including a competitive salary and comprehensive benefits package. Qualified applicants should submit their curriculum vitae, a brief summary of their research interests and a list of 3 references to: PARKE-DAVIS Pharmaceutical Research, Human Resources, Box DS-94074, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"



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As a US subsidiary of an international Fortune 500 company, Berlex is proud to offer competitive salaries and a generous benefits package. To apply, send your CV/resume to: BERLEX, HUMAN RESOURCES EMPLOYMENT, DEPT. B94-020, 15049 SAN PABLO AVE., RICHMOND, CA 94804-0099. EOE. Principals only please.



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The University invites applications for a position of Professor in the Division of Biochemistry and Molecular Biology, School of Life Sciences, Faculty of Science. The Division is responsible for the teaching of undergraduate students in Biochemistry, Molecular Biology, Microbiology, Cell Biology and Parasitology, and shares the responsibility for Genetics with the Division of Botany and Zoology. The Division is active in the education of graduate students through the Graduate Program in Biochemistry and Molecular Biology, which it administers, and through associations with the Programs in Plant Science and Medical Science. Members of the Division have research interests in the biochemistry and molecular biology of a broad range of organisms. Fields of research include aspects of bacteriology, virology, plant molecular biology, parasitology, insect molecular biology and metabolic regulation. The Division has close links with the Cooperative Research Centres for Plant Science and Biological Control of Vertebrate Pests. Applicants should have a record of achievement in molecular biology and will be expected to offer leadership and administrative skills in the maintenance of the Division's strong record in research, teaching and professional activities. The appointee will take over the Headship of the Division on appointment, in the first instance for a period of five years. Enquiries: Professor C. Bryant, Head, Division of Biochemistry and Molecular Biology, telephone 61 6 2492284, email Chris.Bryant@anu.edu.au Further Particulars and the selection criteria are available from the Secretary, telephone 61 6 249 4566, fax 61 6 249 5011. Appointment: to retiring age. Salary: A\$78,991 per annum. Closing Date: 12 August 1994. Ref: FS 15.6.1. APPLICATIONS addressing the selection criteria should be submitted in duplicate to the Secretary, The Australian National University, Canberra ACT 0200 Australia, quoting the reference number and including curriculum vitae, list of publications and names and addresses of at least three referees. The University has a 'no smoking' policy in all buildings and vehicles.

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# SCIENCE's August-September 1994 Recruitment Advertising Calendar of Events

Be sure to include the following important issues in your advertising schedule!

12 August: Computers III Editorial Focus; Research Triangle Park, NC Biotech/ Pharmaceutical Job Fair Distribution 26 August: BS/MS CAREERS Special Advertising Section with Bonus Distribution to 70 U.S. Colleges and Universities 2 September: Frontiers in Medicine Editorial Focus

16 September: NIH Research Week; Meeting Bonus Distribution, Bethesda, MD 23 September: CAREERS IV Editorial Focus; La Jolla, CA & Cambridge, MA Biotech/Pharmacuetical Job Fair Distribu-

**30 September:** Genome Map Editorial Focus; Human Genome Conference Distribution, Washington, D.C.; Lab Expo Distribution, London, England

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Department of Zoology

Applicants with an appropriate doctoral degree in any field of Zoology will be considered. Preference may be given to applicants with specialties in the areas of Population Biology or Ecology of Terrestrial Vertebrates, Marine Zoology or Comparative Vertebrate Physiology. The successful applicants will be responsible to the Head of the Department of Zoology and will be expected to contribute to the undergraduate teaching program at all levels, develop an active research program and attract postgraduate students and external funding.

The Department of Zoology has 19 academic staff and 20 support staff, a large undergraduate enrolment and a postgraduate enrolment of approximately 120. Research interests include terrestrial and marine ecology, genetics, conservation biology, aquaculture, developmental biology, cytology, toxinology, coral reef biology, reproductive biology, behavioural ecology, systematics and evolutionary biology, comparative physiology and vertebrate palaeontology. The Department is a strong partner in the University's Centre for Conservation Biology and the School of Marine Science. More details about the Department and the University may be obtained by writing to Professor Gordon Grigg, Department of Zoology, fax +61 7 365-1655.

Salary: Lecturer A – \$A29,117 to \$A39,495 per annum; Lecturer B – \$A41,574

Salary: Lecturer A – \$A29,117 to \$A39,495 per annum; Lecturer B – \$A41,574 to \$A49,370 per annum. (Level of appointment to depend on qualifications and experience. Applicants may nominate whether they wish to be considered at only one level.)

Closing date: Friday 2 September, 1994. Please send original plus eight copies of a letter of application quoting **Reference No. 28394** and a curriculum vitae, with the names, addresses and fax numbers of three people who could be contacted for references, to Director of Personnel Services, The University of Queensland, Qld 4072 Australia. Confidential facsimile +61 7 365-1677.

# Mark Your Calendar for 23 September: SCIENCE's Annual Careers Issue

On 23 September 1994 *Science* will present its annual Careers issue. Here's your chance to place your advertisement in one of the most important and popular issues of the year. Last year's Careers issue highlighted over 65 pages of career opportunities for scientists at all levels. The 1994 issue will once again rank as one of the top scientific career planning resources. You can be sure scientists at all levels will use the Careers issue to survey the job market and plan future career moves.

When you advertise in the 23 September issue you will receive:

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Copies of the 23 September issue will be distributed to over 2,000 attendees at each of the Biotechnology/Pharmaceutical Job Fairs in La Jolla, CA on September 23-24, and in Cambridge, MA on September 30-October 1.

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The Stritch School of Medicine, Loyola University of Chicago is seeking applications and nominations to the position of Professor and Chair, Department of Surgery. The successful candidate will not only have the opportunity to assume the leadership of a strong, mature faculty but also have the opportunity to diversity the department in new areas of interest.

Candidates should be nationally recognized and have the qualifications and experience to direct a major academic surgical program.

Loyola University is an equal opportunity, affirmative action employer in its 124th year of service to the Chicago area and the nation.

Nominations along with curriculum vitae should be sent to:

Leonard L. Vertuno, MD
Chairperson, Search Committee for Chairperson, Department of Surgery
Stritch School of Medicine
Loyola University of Chicago
2160 South First Avenue
Maywood, Illinois 60153

#### ROSKAMP CHAIR FOR BIOLOGICAL RESEARCH IN PSYCHIATRY

Applications are being sought for the Roskamp Endowed Chair for Biological Research in Psychiatry at the University of South Florida.

Applicants should have a nationally recognized record of research accomplishments in the molecular genetics of mental illnesses. They should possess demonstrated leadership and program development skills, an interest in teaching and a record of independent grant or foundation support.

Applicants should send a curriculum vitae, a statement of research interests and three references by September 1, 1994 to Anthony Reading, M.D., U.S.F. Dept. of Psychiatry, 3515 E. Fletcher Ave., Tampa, FL 33613.

Applicants who need a reasonable accommodation in order to participate in the selection process must notify Kathleen Gay at (813) 972-7054, 48 hours prior to the interview.

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IMUTEC is a Canadian biopharmaceutical company working to develop and commercialize biological treatments for cancer and other diseases. It has applied its proprietary technology to product VIRULIZIN, a biological response modifier that stimulates and modulates components of the immune system to enhance the body's responses to certain diseases.

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Reporting to the President, the Vice President, Scientific Affairs will assume a leadership role in steering and focusing all scientific programs to accomplish company objectives.

The organization seeks a Ph.D. who possesses research and industry related experience specifically in protein separation technology, protein chemistry and immunology activities. Knowledge of cytokines and methods of research ins imperative. In addition, the ideal candidate will have strong project management skills, previous experience with biological products (i.e. immune modulators, etc.), Q.A. and Q.C. programs, as well as a thorough understanding of the requirements of the HPB and FDA.

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The University of Texas Medical Branch at Galveston

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- Comprehensive scholarly credentials, including familiarity with research funding practices and technology transfer
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Inquiries and curriculum vitae should be addressed to:

James F. Arens, M.D.
Vice President for Clinical Affairs
301 University Boulevard
Galveston, Texas 77555-0138
Phone (404) 772-1220 ■ Fax (409) 747-1201



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#### POSTDOCTORAL FELLOW

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PLANT PATHOLOGIST. The Morton Arboretum's Research Department seeks a plant pathologist with responsibilities to include development of an independent research program emphasizing interactions between urban stresses and plant disease, and management of the Arboretum's Plant Clinic. The successful candidate must have a Ph.D. in plant pathology, demonstrated interest in woody landscape plants, and experience in entomology, arboriculture, or plant stress relationships. Postdoctoral experience is desirable. Morton Arboretum is a 1500 acre woody plant museum with modern research facilities located in suburban Chicago. Salary is commensurate with experience. Send letter of intent, curriculum vitae, and names, addresses, and telephone numbers of three references to: Dr. Christopher Dunn, Research Director, The Morton Arboretum, Lisle, IL 60532. Applications will be accepted until September 15, 1994.

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resperienced air modeler.

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#### **ANNOUNCEMENTS**

CaP CURE, The Association for the Cure of Cancer of the Prostate, established with the goal of finding a cure for prostate cancer is soliciting proposals for its 1994/1995 funding year.

Applications (in triplicate, 3 to 5 pages only) must be relevant to basic research or clinical approaches to the treatment of prostate cancer. NIH format bibliographies and the source of current funding should be included with the proposal. We particularly encourage proposals offering an interdisciplinary approach to research. Funding will range from \$50,000 to \$200,000 and is renewable annually. The due date is August 31, 1994, with expected funding in November.

Additional information can be obtained from:
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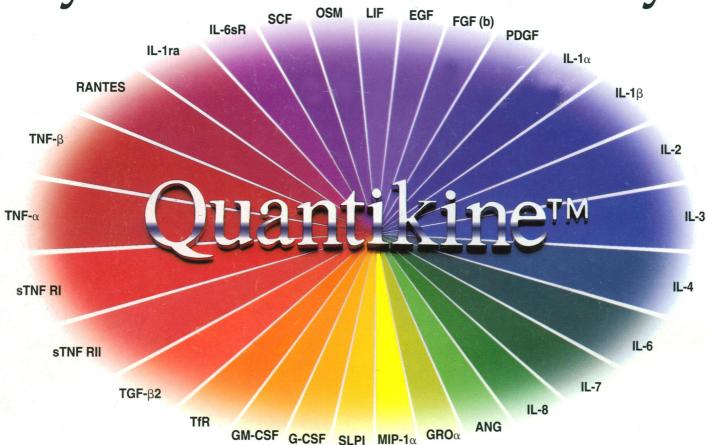
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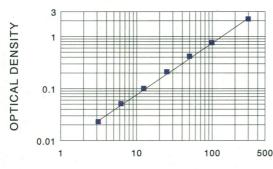
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