

The transcription source

Only Ambion offers five different transcription kits for specific applications

Whether your *in vitro* transcription demands are for high specific activity RNA probes, large mass amounts of RNA, non-radioisotopic RNA probes, end-labeled RNA or large mass amounts of capped RNA, Ambion offers an *in vitro* transcription kit specifically designed to meet your research needs.

Easily prepare high specific activity RNA probes

Ultra high yield technology for 10 to 50 times the yield of conventional reactions

Produce 5'-Hydroxyl-terminated transcripts

Efficiently transcribe small templates with consistent results

Easily obtain high yields of capped RNA

Contact us today for information on our full range of transcription kits for specific applications.

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

(800) 888-8804

Ambion

Innovative Products for RNA Analysis

Circle No. 52 on Readers' Service Card

PRODUCTS & MATERIALS

Image Database

Library is a database manager for images. Library keeps track of a large number of images and offers an intuitive and easy-to-use interface. The images can be captured through certain scanners, frame grabbers, and multimedia boards. LibraryPro has all the features of Library and more, including multi-user security with configurable passcode protection, network compliance allowing central data storage, and two-way communication with other Windows packages. **Data Cell. Circle 132.**

Antibodies

Anti-fluorescein Single-chain Antibody can be used in fluorescence polarization and protein engineering studies, basic research on antibody-antigen binding characteristics, study of tumor antigens, investigations of cell-specific immunotoxins, and a broad range of clinical studies. **PanVera. Circle 133.**

Antibodies to luciferase and β -galactosidase can be used in immunohistochemical applications for the localization of these proteins in cells and tissue and in immunoprecipitation for the determination of successful gene transfection. **Cortex Biochem. Circle 134.**

Image Processing Software

Exhaustive Photon Reassignment (EPR) software for high-resolution fluorescence microscopy makes it possible to visualize the inner workings of healthy or diseased cells and tissues. The technique allows two-dimensional and three-dimensional visualization and study of intracellular structures and processes. The approach has been used in the research of Alzheimer's disease, immune system disorders, multiple sclerosis, atherosclerosis, and chromosomal damage. Originally introduced as an integral part of a complete imaging system that required specialized high-speed computer hardware, the EPR software is now available for use on a

Pentium processor under the Windows operating system. **Scanalytics Division of CSPI. Circle 135.**

Reporter Gene Assay

The Luciferase Reporter Gene Assay is not only faster than conventional isotopic and nonisotopic methods, it is also up to 1000 times more sensitive, according to the manufacturer. The assay has a detectable linear range of 10 fg/ml to 1 μ g/ml yet can be measured in any microplate or tube luminometer, with a scintillation counter, or with photographic film. In contrast to other luciferase-based methods, the assay produces a stable light emission that lasts for several minutes and allows whole microplates to be analyzed after manual addition of reagent. **Boehringer Mannheim. Circle 136.**

Simultaneous Hydrophobic and Ionic Separation

The Hypersil Duet columns are designed for simultaneous separation of hydrophobic and ionic compounds. While high-performance liquid chromatography columns are usually intended to separate only one type of analyte in a given run, the Hypersil Duet columns are composed of a mixture of ion exchange and hydrophobic media that permit the separation of both species. Because the chromatographic properties are intermediate between each phase, the retention of ionic species can be accomplished by a change in pH without affecting the retention of the hydrophobic molecules, as long as the solubility is not affected. **Shandon HPLC. Circle 137.**

Reverse Transcriptase Detection

Quan-T-RT is a single-tube assay that provides direct detection and quantification of reverse transcriptase (RT) in tissue culture supernatants. Like traditional methods, the assay relies on the incorporation of a labeled nucleotide into a growing DNA strand to

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.

detect RT activity. However, because it is based on scintillation proximity assay technology, it removes the need to separate unincorporated nucleotides. It therefore reduces assay time and waste, and lowers the risk of biological and radiological contamination. **Amersham International. Circle 138.**

■

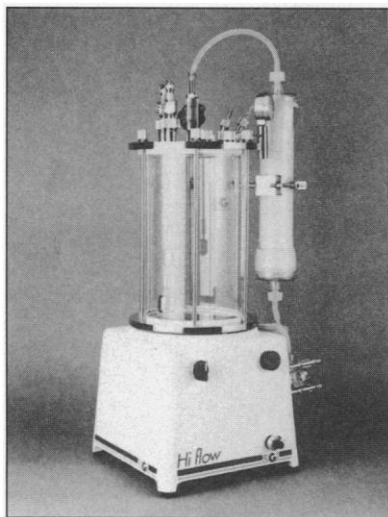
Image Analysis Software

Gel-Pro Analyzer is image analysis software for molecular biologists involved in gel and protein research. The software automates gel reading to improve throughput, minimize ambiguity, standardize laboratory procedure, and increase repeatability. For increased reproducibility, proprietary algorithms correct for smearing, slanted lines and bands, and signal intensity variation. System requirements are a 486DX computer running at 33 Mhz or higher, Microsoft Windows 3.1 or higher, 8 megabytes of random access memory, 6 megabytes of disk space for the program files, a Windows-compatible mouse, and SVGA or better monitor. **Media Cybernetics. Circle 139.**

■

Cross Flow Filtration System

Hi-Flow is a compact, semi-automatic, autoclavable cross-flow filtration system. A wide range of hollow fiber and ceramic mod-



ules are available with the system. Dual level control is standard, with optional equipment including feeding pump, pH measurement, and temperature control. **LH Fermentation. Circle 140.**

■

Hot Start PCR Kit

The HotWax OptiStart Kit improves polymerase chain reaction (PCR) by optimizing three key parameters: nonspecific priming,

MgCl₂ concentration, and pH of the reaction. Each of these parameters can cause background noise and reduce the yield of the product. The kit features HotWax Mg²⁺ Beads, which release MgCl₂ into the PCR reaction when the wax bead melts during the first denaturation step. Each kit comes with HotWax Beads in three different concentrations of MgCl₂ and four Mg²⁺-free buffers at different pH levels, allowing quick determination of the optimal MgCl₂ and pH conditions for the reaction. **Invitrogen. Circle 141.**

■

DNA and Amino Acid Sequence Software

DNASIS 2.0 for Windows is an update of DNA sequence analysis software for IBM-compatible personal computers. DNASIS 2.0 is Pentium-compatible and performs a comprehensive array of DNA primary and secondary structure analysis functions that include DNA motif analysis, protein motif analysis, mutation site analysis, homology plots, and hairpin analysis. The program also includes automatic multiple sequence alignment, homology searches, phylogenetic trees, RNA secondary structure analysis, primer design, restriction enzyme analysis, plasmid map drawing, translations, and voice feedback. The software allows for fast access to the GenBank, EMBL, SWISS-PROT, and NBRF-PIR databases by CD-ROM. **Hitachi Software Engineering. Circle 142.**

■

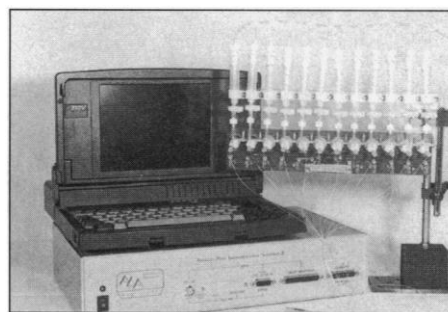
Epitope Analysis System

SPOTs is a system for simultaneously synthesizing up to 96 peptides on a cellulose sheet. The peptides, bound to the sheet, can be immediately probed with antibody. Applications include epitope scanning and analog and boundary analysis. Each 8 cm by 12 cm cellulose sheet contains 96 pre-activated spots. Individual peptides are synthesized at each of these pre-activated spots. Simple self-indicating Fmoc amino acid active ester chemistry ensures high synthetic coupling efficiency. Computer software included with the system provides an easy to follow synthesis schedule. **Genosys Biotechnologies. Circle 143.**

■

Perfusion System

The DAD-12 Superfusion System is a flexible instrument for the application of various concentrations of reagents or drugs to individual cells or tissue. The system makes use of what is referred to as the "sewer pipe" effect in which a large diameter column of liquid is superfused over a cell causing it to be com-



pletely immersed in the applied solution. The DAD-12 is a programmable, computer-controlled, valve management system to facilitate complex superfusion experiments. **Adams and List Associates. Circle 144.**

■

Literature

Get the Most out of Your Titrator! lists more than 120 accessories, products, and parts that enhance a family of automatic titration instruments. **Mettler Toledo. Circle 145.**

Discover the MS250 Advantage describes a high-performance gas analyzer for use in nonhazardous production and laboratory settings. A powerful data system and quadrupole hardware in a compact package make the system useful for quantitative applications where a traditional residual gas analyzer lacks the necessary performance. **Extrel. Circle 146.**

Sample Preparation Products is a catalog featuring more than 2000 application references on the solid phase extraction (SPE) of compounds from a variety of matrices. The catalog highlights SPE devices for manual and automated sample preparation, a range of high-performance liquid chromatography columns, and vacuum manifolds. **Varian Associates. Circle 147.**

DNA Sequencer 725: Affordable Automated Fluorescent Sequencing describes the instrumentation, software, and reagents of a system designed to replace traditional manual film-based sequencing methods. The system automates gel electrophoresis, band detection, lane tracking, and sequence assignment. **Molecular Dynamics. Circle 148.**

Quantitative HPLC/MS/MS in Support of a Pharmacokinetic Study is an application note on the use of high-performance liquid chromatography and mass spectrometry for pharmaceutical studies, from drug discovery through metabolism and toxicological studies. **Fisons Instruments. Circle 149.**

ZVS Video Camera Systems: Real-Time Digital Imaging is a color brochure on high-resolution video microscopy. **Carl Zeiss. Circle 150.**

The AAAS is on the move... We'd like you to come along.

The American Association for the Advancement of Science is delighted to announce the relocation of our headquarters to the new AAAS Center for Science and Engineering. Just down the street from our current Washington, D.C. address, our new home promises to be a landmark building in the District of Columbia. World-class architects Pei Cobb Freed & Partners designed this facility for maximum energy efficiency, using innovative systems for collecting daylight to reduce lighting loads by 75% and providing separate temperature and light-sensor controls in each exterior office.

The twelve-story, 200,000 sq ft building was planned to enable three floors of tenant space to be offered to select, non-profit, science-related firms that support AAAS objectives. While most of that space is now leased, there are still attractive blocks of space at below-market rates.

If your science-related organization is looking for a new home, please call AAAS for more information at (202) 326-6687.

Other features of the new AAAS Center include:

- Gas fired heating/cooling systems that exclude CFC's.
- Environment-sensitive design that includes operable windows.
- 180-seat auditorium and adjacent conference center with state-of-the-art multimedia equipment available to all tenants.
- Convenient downtown location with underground parking and also just one block from Washington's metrorail system.



AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE

*The American Association for the Advancement
of Science Headquarters
"The Center for Science and Engineering"
1200 New York Avenue, NW, Washington, D.C.*



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
(please include telephone number in email correspondences)

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. Line advertisements are not commissionable.

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: gopher.aaas.org
WWW: <http://www.aaas.org>

Science reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

CELLULAR/MOLECULAR PHYSIOLOGY OR PHARMACOLOGY

The Department of Basic Medical Sciences invites applications for a full-time, tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR**. Ph.D. or equivalent degree with at least three years of postdoctoral experience. The successful candidate will be expected to develop a creative, independent, extramurally funded, research program that complements existing programs within the department, school, and the NCI-designated Purdue University Cancer Center. A demonstrated interest in cancer related translational research; a commitment to excellence and participation in one or more of our educational programs which include courses offered to undergraduate, graduate, veterinary, and medical students; and a commitment to the goals of the department and school are important.

Research areas of interest include extracellular matrix, cell growth, differentiation, development, signal transduction, gene transfer (transgenic animals), and cell cycle regulation. Resources include facilities that support animal models: DNA/protein synthesis and sequencing; antibody production; and state-of-the-art laboratories which include confocal and electron microscopy and flow cytometry.

Applicants should send a curriculum vitae, relevant reprints, a one-to-three page description of teaching and research plans and goals, and a list of three references (including address, telephone and FAX numbers, and Email address) to: **Dr. J. Paul Robinson, School of Veterinary Medicine, Purdue University, West Lafayette, IN 47907-1246. FAX: 317-494-0781. Email: paul@flowcyt.cyto.purdue.edu or the Web: <http://www.cyto.purdue.edu/BMS.html>.** *Purdue University is an Equal Opportunity/Affirmative Action Employer. Minority and female applicants are especially welcome.*

ASSISTANT PROFESSOR OF ENTOMOLOGY BIOLOGICAL CONTROL

Department of Entomology, University of Arizona. Twelve-month, tenure-track position (80% research, 20% teaching). The successful candidate will: develop and teach a course on the theory and application of biological control as it pertains to insects (teaching in other courses may be required); be able to assist in the development and strengthening of the curriculum in applied entomology; be expected to supervise undergraduate and graduate students; develop a research program that includes a balance between laboratory and field studies. Research should enhance our basic understanding of biological control and have application toward solving pest problems, particularly those found in Arizona. Strengths in such areas as behavior, population genetics, modeling, augmentation and conservation of natural enemies would be desirable. Minimum qualifications include an earned doctorate in entomology or a related science and demonstrated expertise in biological control. Postdoctoral experience is desirable as is demonstrated ability to acquire extramural funding. Salary is commensurate with qualifications. Send letter of application addressing reasons for interest in position, plans for teaching and research, curriculum vitae, transcripts, selected papers (five maximum) and the names and addresses of three individuals who are willing to provide references to: **David N. Byrne, Acting Head, Department of Entomology, University of Arizona, Tucson, AZ 85721. Telephone: 602-621-1151; FAX: 602-621-1150; Email: byrne@ag.arizona.edu** by September 1, 1995. *The University of Arizona is an Affirmative Action/Equal Employment Opportunity/ADA Employer. Applications from women and members of minority groups are encouraged.*

ASSISTANT/ASSOCIATE PROFESSOR

The Biology Department of Gannon University is seeking a well qualified candidate to fill a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level.

Responsibilities: Include teaching Human Anatomy with a cadaver-based lab, Immunology, and Freshman Biology. Some research in area of personal expertise is expected.

Requires: Ph.D.; experience in human dissection; a strong commitment to undergraduate teaching.

Position Available: August 1995.

Application: Send letter of application noting teaching and research interests, curriculum vitae and two letters of recommendation by July 15, 1995, to: **Director of Personnel, Gannon University, University Square, Erie, PA 16541.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH

The Departments of Environmental Sciences and Engineering and Epidemiology at the University of North Carolina at Chapel Hill seek applications for a tenure-track faculty position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. The applicant must have a doctorate in industrial hygiene, environmental health, environmental engineering, epidemiology, or a related discipline and possess expertise in assessing exposures to chemical or physical agents in occupational and environmental settings. Preference will be given to individuals with strong statistical skills in relevant applications. The successful applicant will develop an independent research program in some aspects of exposure assessment, will contribute to interdisciplinary studies of health effects in human populations, and will teach courses related to human exposures. The primary appointment will be in the Department of Environmental Sciences and Engineering with a joint appointment in Epidemiology; the nature of the joint appointment will depend upon the qualifications and interests of the candidate.

The School of Public Health provides exceptional resources for research, training, and collaboration in the areas of interest, and long-term training grants are available for support of doctoral and postdoctoral trainees. Those interested should send a curriculum vitae with the names of three references to: **Professor S. M. Rappaport, Department of Environmental Sciences and Engineering, School of Public Health, CB No. 7400, University of North Carolina, Chapel Hill, NC 27599-7400.** Applications must be received by 1 October 1995. *The University of North Carolina is an Affirmative Action/Equal Opportunity Employer. Minority and female candidates are encouraged to apply.*

FACULTY POSITION Experimental Gravitational Physics

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

ASSISTANT RESEARCH SCIENTIST AQUATIC ENTOMOLOGIST

The Illinois Natural History Survey, Center for Biodiversity seeks candidates for an **ASSISTANT RESEARCH SCIENTIST/Aquatic Entomologist** (grant-supported, full-time position).

This position conducts environmental assessments in Illinois Department of Transportation project areas. Requirements: an advanced degree is required, although a Ph.D. is desirable; training in insect systematics and ecology; extensive field experience; and experience in identification of aquatic insects and analysis of insect populations. As time permits, independent research is expected to be pursued. The ability to conduct, lead, plan, supervise, and evaluate research activities is also required.

Closing date: 1 August 1995. Send letter of application, résumé, and names, addresses, and telephone numbers of three references to: **Ms. Jacqueline Sanders, Personnel Officer, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820. Telephone: 217-244-7790** for a copy of the position announcement.

The Illinois Natural History Survey is an Equal Employment Opportunity/ADA Employer.

A New Name, An Even Newer Perspective

R&D Scientists

Miami, FL Facility

Motivated Ms/PhD level research scientists are needed to build on our strong R&D programs in blood coagulation, clinical chemistry control materials, and cardiac diagnostics. These positions require a degree in chemistry, biochemistry, or related disciplines along with an established track record of research and product development accomplishments. Areas of focus will include thrombosis and fibrinolysis research, protein purification, protein/enzyme stabilization, immunoassay development, or protein structural characterization by biochemical, immunochemical, or biophysical techniques. Excellent communication skills and the desire to work in a "team environment" are essential.

DADE
DADE INTERNATIONAL

At Dade International, our name isn't the only thing that's new. A privately held company with 1994 annual sales of approximately \$700 million, we are a leader in the development, production, and sales of systems for the blood coagulation, immunochemistry, microbiology, and clinical chemistry in-vitro diagnostics markets. Our investment in innovative people and products and our commitment to cutting-edge technology has positioned us for growth and expansion beyond compare. As a result, we are seeking the following talented and dedicated professionals to share our vision and support our success:

Sacramento, CA Facility

MicroScan provides automated systems for identification and susceptibility testing for the clinical microbiology laboratory. We are developing new programs in the areas of mechanisms of resistance of clinically relevant microorganisms and analysis of complex biological materials. PhD. level scientists in molecular biology/microbiology or biochemistry/analytical chemistry are encouraged to apply. Two to three years of post-doctoral or industrial experience are required, as well as demonstrated success in team efforts. Excellent communication and leadership skills are needed.

Dade offers an excellent salary and benefits package, as well as a dynamic, professional environment. For immediate consideration, please send or fax a resume with salary requirements to: Dade International Inc., P.O. Box 520672, MS-602, Miami FL 33152-0672. Attn: EB. Fax: 305-222-6500. An Equal Opportunity Employer M/F/D/V.

Research Associate

At Amgen, you'll discover a research environment that emphasizes collaboration, intellectual honesty, scientific integrity, and a supportive culture. This unique approach has helped us grow into a global biotechnology leader in just fifteen years. We currently seek a Research Associate for our Boulder, CO facility.

Candidates will have a BS or MS in Biochemistry, Cell Biology, Biophysics, or a related discipline and typically 3-5 years' industrial laboratory experience in assay development or high throughput screening. Experience in development of ELISAs, RIAs, and/or cellular assays is required. Solid data analysis skills are essential. The preferred candidate will have experience with automated assay equipment, and will be familiar with computer graphics and spreadsheet programs.

We recognize that diverse perspectives are a key factor in the process of discovery.

At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package. Please mail your resume/c.v. to: Amgen Boulder, Human Resources Dept., Job Code: OXP-SC-RARN, 3200 Walnut Avenue, Boulder, CO 80301. Principals only, please. Please consult our on-line Job Bulletin Board at <http://www.bio.com> for information on other career opportunities available at Amgen.

EEO/AA Employer M/F/D/V

AMGEN®



RESEARCH MANAGER, PHYSIOLOGIST/MOLECULAR GENETICIST (JOB #1060)

Pioneer Hi-Bred International, a global leader in the exciting field of agricultural genetics, has a challenging opportunity for a resourceful professional to join its team working to define, isolate, and study genes that contribute to agronomic performance in corn. Responsibilities will involve both field and lab efforts in the study of crop performance with advanced commercial materials. The ability to initiate both physiological and molecular genetic approaches to identify genes that are likely candidates for major controllers for yield and its components is essential.

The qualified candidate will have hands-on experience in gene cloning and analysis and two or more years of related laboratory experience. The ability to analyze performance at the whole plant level by physiological methods and then follow up with molecular genetic analysis to understand gene contributions to meaningful physiological differences is required. You must be capable of working independently as well as in a team setting and have a proven track record of publication demonstrating past research productivity. A Ph.D. in Plant or Crop Physiology or a closely related discipline is required.

We offer a very competitive salary and excellent benefits such as 401(k), tuition reimbursement, and relocation assistance. Des Moines is a vibrant and prosperous heartland city that ranks well above the national average in affordability and education and offers big city cultural advantages with a rich outdoor life just minutes away. Please send two copies of application resume and cover letter indicating job number by August 1, 1995 to: **Jon Day, Employment Manager, Pioneer Hi-Bred International Inc., 6800 Pioneer Parkway - Box 212, Johnston, IA 50131-0212.** No phone calls, please. An Equal Opportunity Employer.



PIONEER HI-BRED INTERNATIONAL, INC.

POSITIONS OPEN

DIVISION OF HEMATOLOGY VANDERBILT CANCER CENTER

A tenure-track faculty position is available in the Division of Hematology/Vanderbilt Cancer Center. This position is at the **ASSISTANT/ASSOCIATE PROFESSOR** rank and carries a competitive start-up package. Outstanding candidates will be considered in all fields of laboratory-oriented cancer research related to the study of leukemia/lymphoma. The investigator will have a primary appointment in a Medical School department and will be housed in newly constructed Cancer Center space. Candidates should send a curriculum vitae, an outline of research plans, and three letters of recommendation to:

Sanford B. Krantz, M.D.
Director, Division of Hematology
The Vanderbilt Cancer Center
649 Medical Research Building II
Vanderbilt University Medical Center
Nashville, TN 37232-6838

Vanderbilt is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

Applications are invited for the position of **ASSISTANT PROFESSOR**, Research Title Series, in the Department of Diagnostic Radiology with a joint appointment in the Department of Anatomy and Neurobiology, University of Kentucky College of Medicine. The initial appointment is for three years. The successful candidate will have experience in the use of functional MRI for the study of patterns of neural activity in humans and non-human primates. A strong background in physics is expected. The candidate must have experience in operating and programming the Siemens Magnetom Vision system or equivalent instrumentation, and have experience in the handling of non-human primates.

Applications including curriculum vitae, bibliography and a list of three references should be sent to: James C. Reed, M.D., Professor and Chair, Department of Diagnostic Radiology, University of Kentucky, 800 Rose Street, Lexington, KY 40536-0084. *The University of Kentucky is an Equal Opportunity Employer.*

VANDERBILT UNIVERSITY CANCER CENTER

Six (6) tenure-track or tenured positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level for physician/scientists (M.D. or M.D./Ph.D.) or scientists (Ph.D.) are available at the Vanderbilt Cancer Center with Medical School appointments in clinical (Medicine/Oncology, Surgery, Pediatrics, Urology) and appropriate basic science departments. A competitive start-up package including newly constructed laboratory space will be negotiated. Candidates require a strong commitment to basic science-based translational cancer research with an emphasis but not limited to gene therapy in solid tumors. Please send curriculum vitae, a description of future research plans, and three letters of recommendation to:

Chair, Gene Therapy Search Committee
Vanderbilt University Cancer Center
Pierce and 22nd Avenue South, 649 MRB-II
Nashville, TN 37232-6838

Vanderbilt is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOCHEMISTRY

Applications are invited for a non-tenure-track position of **RESEARCH INSTRUCTOR** in Biochemistry which will focus on fundamental research into the structure/function of the P450 gene superfamily of proteins. The successful candidate will have a Ph.D. in Biochemistry/Molecular Biology with experience in molecular biological techniques such as PCR amplification of genes, site-directed mutagenesis, cloning of genes and expression of their proteins. Additional experience in purification, characterization and assay of P450 dependent fatty acid and steroid hydroxylases is required. The applicant will be expected to have employed molecular modeling, molecular dynamics, and energy minimization of proteins and their substrates in their prior research. The applicant should be able to document the experience with authorship of publications in respected journals and invitations to speak at international meetings. Applicants should submit a curriculum vitae, three letters of reference, and a short summary of proposed research to: Dr. Julian A. Peterson, Department of Biochemistry, The University of Texas Southwestern Medical Center at Dallas, Dallas, TX 75235-9038. *The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DEPARTMENT OF INTERNAL MEDICINE ALLERGY AND IMMUNOLOGY Position No. 66537

RESEARCH ASSISTANT PROFESSOR at the University of South Florida, Division of Allergy and Immunology. Focus will be to enhance the development of an existing biomedical research program with the aim of becoming externally funded within two to three years. Close interaction with clinical faculty required while assisting in the teaching and research work of trainees. Need experience in protein purification and analysis, immunologic methods, cytokine identification, gene cloning, protein sequencing. Ph.D., M.D., or equivalent required; at least two years of productive postdoctoral work desired. Salary and fringe benefits for two to three years, start-up funds, and laboratory space available. This position may be tenure-earning. Send by August 3, 1995, current curriculum vitae, research interests, names and telephone numbers of three references to: Dr. Dennis Ledford, USF, 13000 Bruce B. Downs Boulevard, VAR111D, Tampa, FL 33612. Telephone: 813-972-7631 five days in advance for disability accommodations. *Equal Opportunity/Equal Access/Affirmative Action Employer.*

ASSISTANT PROFESSOR, Retrovirology position is available in the Comprehensive AIDS Program at the University of Miami School of Medicine. Exciting opportunity to lead efforts on retroviral markers for clinical trials in HIV-infected adults and studies on pathogenesis related to HIV infection with emphasis on viral load and drug resistance. M.D. required. Must have or be eligible for Florida Medical License. Please send curriculum vitae to: Dr. Margaret Fischl, University of Miami School of Medicine, Department of Medicine, R-60A, P.O.B. 016960, Miami, FL 33101. *The University is an Equal Opportunity/Affirmative Action, and Drug-free Employer.*

The University of Pittsburgh is expanding its active Program in Bioengineering which has been designated as one of the thrust areas for the School of Engineering. The Bioengineering Program, which is jointly sponsored by the School of Medicine, offers an M.S. and Ph.D. in Bioengineering; an undergraduate B.S. in Bioengineering is being developed.

Currently there are 25 faculty closely associated with the Program in Bioengineering. Their respective disciplines span the fields of biomechanical engineering, biochemical engineering, tissue engineering, rehabilitation engineering, ergonomics, control systems and biomedical imaging.

We are seeking a senior level person who will hold a **FACULTY POSITION** in Chemical Engineering and will have a leadership role in the further enhancement of our research and educational programs. The incumbent should hold a Ph.D. and have significant experience in an academic setting including a proven track record of leadership and scholarly accomplishment. This is a full-time, tenure stream appointment. Full consideration of applications will begin on July 1, 1995, and will continue until the position is filled. A complete dossier should be sent to:

Dr. Jerome Schultz
Center for Biotechnology and Bioengineering
The University of Pittsburgh
300 Technology Drive
Pittsburgh, PA 15219

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

FACULTY POSITION IN TOXICOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

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

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

University of California, Irvine is an Equal Opportunity/Affirmative Action Employer Rooted in Education; Enriched by Diversity.

POSITIONS OPEN

THE UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

The Department of Biochemistry invites applications for two **TENURE-TRACK POSITIONS**, rank open. Applicants should have a Ph.D. in Biochemistry or related discipline, relevant postdoctoral experience, publications, and should be strongly committed to an academic career in biomedical research and teaching. Salary will be commensurate with experience and qualifications. Preference will be given to individuals with extramural grant support whose research interests complement the existing strengths of the department. Areas of interest include, but are not restricted to, neurochemistry, gene regulation, the metabolic basis of disease and molecular nutrition. Areas of strength in the School of Medicine include genetics, cancer, virology, and neuroscience. Candidates should send their curriculum vitae, a description of their research interests, and three letters of recommendation to: Dr. David Vander Jagt, Chair, Search Committee, c/o Ms. Danna Owens, Department of Biochemistry, University of New Mexico, School of Medicine, Albuquerque, NM 87131-5221. Applications must be received by August 31, 1995. *The University of New Mexico is an Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK FACULTY POSITIONS Vanderbilt Cancer Center

Several tenure-track **FACULTY POSITIONS** are available in the Vanderbilt Cancer Center. Outstanding candidates will be considered in all fields of cancer research but priority will be given to individuals interested in the identification or functional characterization of cancer genes and in molecular epidemiology. Investigators will have primary appointments in Medical School departments and will be housed in newly constructed Cancer Center space. Academic rank and start-up package commensurate with achievements. Candidates should send a curriculum vitae, an outline of research plans, and three letters of recommendation to:

Chair, Faculty Search Committee
The Vanderbilt Cancer Center
649 Medical Research Building II
Nashville, TN 37232-6838

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

TENURE-TRACK POSITION available at the University of Tel-Aviv, Sackler School of Medicine, Department of Human Microbiology. Successful candidate will teach M.D. and graduate students and will develop new academic course. Applicants with interest in cell biology, molecular biology, immunology or pathogenesis of parasitic infections are especially encouraged.

Salary, laboratory space and start-up funds are available for this position, but there should be evidence of ability of the candidate to successfully compete for peer-reviewed research funding.

Please send curriculum vitae, a statement of career plans and at least three letters of recommendation (to be sent directly by the referees) to:

Professor Eliezer Kaplinsky
Dean, Sackler School of Medicine
Tel-Aviv University, Tel Aviv 69978 Israel

FACULTY POSITION IN RADIATION BIOLOGY AT STANFORD UNIVERSITY

The Division of Radiation Biology of the Department of Radiation Oncology is seeking applicants for a tenure-track position at the **ASSOCIATE** or **FULL PROFESSOR** level. We seek outstanding applicants with proven research records in the application of molecular biology to DNA repair and/or recombination in mammalian cells. Criteria for selection include: a proven track record of research with ability to secure national funding and relationship of research programs to existing faculty interests in molecular aspects of cellular stress to hypoxic conditions, determinants of resistance of cancers to treatment, and DNA damage and repair following ionizing radiation. Applicants should submit curriculum vitae and names of three references to: Dr. J. Martin Brown, Director, Division of Radiation Biology, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, CA 94305-5468. *Stanford University is committed to increasing representation of women and members of minority groups on the faculty and particularly encourages applications from such candidates.*

Gene Medicines For Controllable Gene Therapy

GENEMEDICINE, INC. is developing non-viral gene therapy products through corporate partnerships. We wish to appoint highly motivated and qualified professionals for the following key positions:

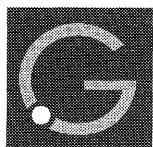
Scientists- Gene Delivery

We seek accomplished pharmaceutical scientists to join the **GENEMEDICINE** team of researchers engaged in creating, characterizing and optimizing novel, non-viral gene delivery systems. Candidates should understand the biological challenges associated with different routes of administration (e.g. pulmonary, intravascular, intramuscular and intratumoral) and have successfully designed, formulated and scaled-up innovative delivery systems based upon lipids, peptides or polymers.

We also seek bioanalytical scientists and physical chemists experienced in characterizing the colloidal properties of particulate delivery systems, preferably non-viral gene delivery systems. These candidates should have demonstrated expertise in the physicochemical characterization of macromolecules.

Successful candidates will have worked within interdisciplinary teams, possess superior verbal and written communication skills and will have a Ph.D. with at least one year of post-doctoral experience or an M.S. with at least two years experience.

GENEMEDICINE, INC., offers career growth and highly competitive compensation packages. For confidential consideration please send a resume to: **GENEMEDICINE, INC.**, Attn: Human Resources, 8301 New Trails Drive, The Woodlands, TX 77381-4248, or fax to: (713) 364-0858.



GENEMEDICINE, INC.

PRE-ANNOUNCEMENT

Associate Director for Research
National Center for Toxicological Research
Jefferson, Arkansas 72079-9502

The National Center for Toxicological Research (NCTR) will soon announce an opening for the position of Associate Director for Research. The purpose of this "pre-announcement" is to ascertain interest and increase the likelihood of obtaining a diverse set of candidates. Respondents will receive the official announcement when it is issued.

NCTR is part of the U. S. DHHS/PHS/Food and Drug Administration (FDA) and is located 35 miles south of Little Rock Arkansas. The mission of NCTR is to conduct peer-reviewed scientific research that supports and anticipates the FDA's current and future regulatory needs. This involves fundamental and applied research specifically designed to define biological mechanisms of action underlying the toxicity of products regulated by the FDA. This research is aimed at developing methods to improve assessment of human exposure, susceptibility, and risk. This position exercises administrative and programmatic control over the Office of Research. The Office contains approximately 150 research and support staff, with close to 100 doctoral-level investigators.

This opening is a civil service position which will be placed either in the Senior Executive Service (SES) or the Senior Biomedical Research Service (SBRS). The SES salary range is \$108,395 to \$113,400. The SBRS is a new system awaiting final approval, but salary ranges are expected to be comparable to or exceed those of SES.

Qualifications include meeting at least the minimum qualification requirements for the GS-15 level of the civil service General Schedule and a strong scientific background and managerial experience/potential. SBRS requires an earned doctoral-level degree in biomedicine or in a related field.

To express your interest, mail a *curriculum vitae* or resume to: FDA/NCTR, Personnel Office, 3900 NCTR Road, Jefferson, Arkansas 72079-9502; or FAX to Mr. King, NCTR Personnel Office, 501/543-7711. **Replies must be postmarked or FAXed by July 31, 1995.** *United States citizenship is required. FDA/NCTR is an equal opportunity/affirmative action employer; FDA is a smoke-free environment.*

NEW ENGLAND CAREER OPPORTUNITIES

Faculty Positions in Molecular Visual Sciences Harvard Medical School Massachusetts Eye and Ear Infirmary

We invite applications for new faculty appointments in the field of molecular and physiological biology of vision. One or two positions will be filled at the rank of Assistant or Associate Professor. Candidates are sought with strong backgrounds in biochemistry, cell biology, development, genetics, gene therapy, or physiology. The successful candidates will be expected to develop research programs addressing functions or malfunctions associated with the retina, pigment epithelium, or glaucoma. Our objectives are to expand our group with excellence in basic disciplines and to discover normal aspects or errors in mammalian visual functioning as they may pertain to human disease.

Application materials should be submitted as soon as possible, but no later than November 1, 1995. Applicants, who must have either a PhD or MD, should forward their *curricula vitae*, summaries of research interests, and representative reprints, and arrange for three letters of recommendation to be sent to:

Ms. Lois Toutwid
Harvard Medical School
Massachusetts Eye and Ear Infirmary
Department of Ophthalmology
243 Charles Street
Boston, MA 02114

Harvard Medical School and Massachusetts Eye & Ear Infirmary are Affirmative Action/Equal Opportunity Employers, M/F/D/V

RESEARCH INVESTIGATOR

A position is available in the Laboratory of Molecular Growth Regulation, National Institute of Child Health and Human Development, for a Research Investigator with expertise in cell cycle analysis. The applicant must have substantial experience in molecular cloning and transfection techniques, Western and coimmunoprecipitation analysis, affinity cell sorting, and preparation of bromodeoxyuridine-labeled nuclei for multi-channel flowcytometry. The applicant must also have experience in fluorescence in situ hybridization and confocal microscopy. Ph.D. or equivalent required. Salary range is \$35,000 to \$45,000, depending on experience. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, membership or non-membership in an employee organization. U.S. citizenship is required.

To apply, please send curriculum vitae, reprints, description of relevant research experience and a list of references to:

Dr. Bruce Howard, Chief
Lab. of Molecular Growth Regulation
DHHS, PHS, NIH
National Institute of Child Health and Human Development
Building 6, Room 416
6 CENTER DRIVE MSC 2753
BETHESDA, MD 20892-2753

*Applications must be received by
July 21, 1995.*

NIH/NICHD is an Equal Opportunity Employer

POSITIONS OPEN

MARINE BIOLOGIST

Department of Organismic and Evolutionary Biology
Harvard University

The Department seeks a marine biologist whose work addresses in broad terms organismic and evolutionary aspects of marine symbioses. The appointment will be to a **TENURED PROFESSORSHIP**. Applicants should submit, by 24 July 1995, a curriculum vitae, a statement of research and teaching interests, and the names and addresses of three references to:

Professor James J. McCarthy
Chairman, Marine Biology Search Committee
Department of Organismic and Evolutionary Biology
Harvard University
Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority candidates.

SABA UNIVERSITY SCHOOL OF MEDICINE

Immediate openings for Ph.D. **TEACHING FACULTY** in Gross Anatomy, Genetics, Neurosciences, Pharmacology. Scholarships are also available for Ph.D.'s who wish to complete their M.D. SABA University is a Dutch medical school located in the Caribbean near St. Maarten. Call or send curriculum vitae to: **Dr. David Fredrick, 2421 West Pratt Boulevard, Suite 444, Chicago, IL 60645. Telephone: 803-278-5544 or FAX: 803-278-5552.**

The Mayo Clinic Department of Laboratory Medicine and Pathology is seeking a **CO-DIRECTOR** for the Molecular Genetics Laboratory. The Molecular Genetics Laboratory currently offers a wide range of diagnostic assays for both inherited as well as neoplastic disorders, with an annual volume of approximately 3,500 cases. The successful candidate will have either an M.D. or Ph.D. degree with a minimum of two to three years of experience in clinical molecular genetics/molecular pathology. American Board of Medical Genetics certification or eligibility is desirable. The primary responsibility will be clinical, which will include interpretation and signing out of test results, troubleshooting of problems in the laboratory, participating in quality assurance programs, and the development of new tests and/or technology. This individual will also be expected to participate in, or develop, an active program in education (technologists, residents, fellows) and/or research. Rank and salary will be commensurate with experience. Applications should be received prior to August 25, 1995. Curriculum vitae, a cover letter detailing experience, future interests, and names of three individuals that can provide letters of recommendation should be sent to: **Stephen N. Thibodeau, Ph.D., Director, Molecular Genetics Laboratory, Mayo Clinic, 200 First Street SW, Rochester, MN 55905. FAX: 507-284-0043. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Employer.**

Beth Israel Hospital, Boston, Massachusetts, a major research-intensive affiliate of Harvard Medical School, announces a search for the **VICE PRESIDENT**, Science and Technology. The Vice President will be responsible for Grants and Contracts, Corporate Relations, and Research Operations as he/she oversees the conduct of research at the hospital. Candidates must possess an M.D. and/or Ph.D. degree(s) with a background in science (preferably biomedical); prior NIH grant support; experience in academic medicine and management of complex organizations preferable. Please send curriculum vitae to: **John H. Moxley, III, M.D., Managing Director, North American Health Care Division, Korn/Ferry International, 1800 Century Park East, Suite 900, Los Angeles, CA 90067. Beth Israel Hospital is an Affirmative Action/Equal Opportunity Employer.**

The Department of Chemistry of Yale University seeks qualified candidates with Ph.D. degrees and teaching experience to fill a one-year position as **LECTURER**. Responsibilities include organization of discussion sections and laboratory materials, supervision of teaching assistants, and implementation of computer instruction in undergraduate general and physical chemistry courses. The position is available immediately. Candidates should submit a résumé and a list of three references to: **Lecturer Search, Department of Chemistry, Yale University, P.O. Box 208107, New Haven, CT 06520-8107. The deadline for applications is August 1, 1995. Yale University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

CHILDREN'S HOSPITAL UNIVERSITY OF CINCINNATI Director, Developmental Biology

Applications are invited for the position of **DIRECTOR** of Developmental Biology and Albert Sabin Professor of Pediatrics to lead a well-established program in molecular and developmental biology. Candidates will be expected to direct their own outstanding research program, lead the Division of Developmental Biology (a 10 member Ph.D. faculty with primary focus to the molecular biology of mammalian development), participate in a well-established graduate program in developmental biology and interact with research activities in developmental sciences at the Children's Hospital Research Foundation and the University of Cincinnati College of Medicine. Candidates will have an M.D. and/or Ph.D. degree and an internationally recognized program in developmental molecular biology. Outstanding support facilities are available for the Director and the program. Send a letter of interest and curriculum vitae to: **Jeffrey A. Whitsett, Associate Chair of Pediatrics, c/o Search Committee, Children's Hospital Medical Center, Division of Pulmonary Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.**

PROGRAM DIRECTOR EDUCATION OUTREACH PROJECT

The BioTech Project seeks a Ph.D. level science educator with molecular biology experience to coordinate our outreach program. This individual will participate in summer workshops, travel to 12-18 Arizona high schools per year, develop and run short workshops for teachers at the schools, write grant proposals to expand the project, and supervise graduate student(s) who will assist with ordering and preparing materials for school visits. Candidates with experience in teacher outreach activities will be given priority. Salary will be \$32,000 to \$35,000, commensurate with qualifications. To ensure consideration, applications should be received by July 20, 1995, although applications will be accepted until the position is filled. Send curriculum vitae; statements of outreach, teaching, and research interests; and three letters of recommendation to: **Dr. Gail D. Burd, Department of Molecular and Cellular Biology, Life Sciences South 444, University of Arizona, Tucson, AZ 85721. The University of Arizona is an Equal Employment Opportunity/Affirmative Action/ADA Employer. Women and members of underrepresented groups are encouraged to apply.**

POSTDOCTORAL RESEARCHER

POSTDOCTORAL POSITION in Biochemical Pharmacology at a biopharmaceutical company. Degree in Pharmacology, Biochemistry, Neuroscience or related discipline. Radioligand binding, analytical chemistry (HPLC, GC) and/or in *in vitro* or *in vivo* neurochemical techniques preferable. Ability to work independently as well as interact effectively as part of a team in a multidisciplinary environment on projects related to CNS drug discovery. Effective communication skills essential. Send curriculum vitae to: **CoCensys, Inc., Human Resources, Job No. PD-101, 213 Technology Drive, Irvine, CA 92718.**

POSTDOCTORAL wanted to investigate the structure, function, and biosynthesis of the bacterial flavocytochrome *p*-cresol methylhydroxylase. Site-specifically altered forms that are created using X-ray structural information will be studied. Modern molecular biology experience is a must. Protein chemistry and computer molecular modeling experience a plus. Curriculum vitae and reference letters to: **Dr. William McIntire, Molecular Biology Division (151-S), Department of Biochemistry and Biophysics, University of California at the VA Medical Center, 4150 Clement Street, San Francisco, CA 94121.**

POSTDOCTORAL POSITION available immediately to investigate the mechanisms of cytokine/growth factor receptor signaling in hematopoietic cells using the yeast two-hybrid system for detecting protein-protein interactions. \$25,000 to \$30,000 per year plus fringe benefits. Send curriculum vitae, statement of research interests and experience and three recommendations to: **Dr. Keith Kelley, University of Illinois, 207 Edward R. Madigan Laboratory, 1201 West Gregory, Urbana, IL 61801. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION TBP and TAF Structure-Function Studies

An NIH-funded **POSTDOCTORAL POSITION** is available immediately to examine the role of the TATA-Box Binding Protein, TBP and its associated factors (TAFs) in transcription initiation complex formation in the *Saccharomyces cerevisiae* system (see *J. Biol. Chem.*, 269: 23135; 269:28335 and *Genes & Develop.*, 8:2868). We are currently using a combination of biochemical, genetic and biophysical methods to study the interactions of these proteins with TBP, DNA and other transcription factors. Interested parties should send a curriculum vitae and arrange to have three letters of reference sent directly to: **Dr. Tony Weil, Department of Molecular Physiology & Biophysics, Vanderbilt University, School of Medicine, Nashville, TN 37232-0615. FAX: 615-322-7236; Email: tony.weil@mcmail.vanderbilt.edu. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS IN CELLULAR NEUROPHYSIOLOGY

The Neurosciences Unit at the Loeb Research Institute, Ottawa Civic Hospital and University of Ottawa, has one-to-three year openings for **POSTDOCTORATE POSITIONS** in cellular electrophysiology, to study intrinsic and synaptic properties, transmitter-receptor interactions and signal transduction in CNS neurons regulating pituitary secretion and spinal sympathetic outflow. Requires M.D. or Ph.D. degree, and experience with *in vitro* preparations, current and patch clamp recording techniques. You will be joining a Neurosciences Program comprised of eight PI's with expertise in molecular and cellular neurobiology applied to exocytosis, membrane trafficking, signal transduction, ion channel function, post-ischemic neuronal function and survival. Salary range \$28,650 to \$34,500 (Can). Send or FAX (617-761-5360) curriculum vitae, a short statement of interests and names of three references to: **Dr. Leo Renaud, Director, Neurology/Neurosciences, Ottawa Civic Hospital, 1053 Carling Avenue, Ottawa, Ontario K1Y 4E9 Canada.**

POSTDOCTORAL POSITIONS

POSTDOCTORAL POSITIONS are available immediately for an NCI training program in molecular and cellular mechanisms of carcinogenesis at The University of Texas M. D. Anderson Cancer Center-Science Park. Research programs focus on the following areas: DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, normal and tumor cell differentiation, retrovirology, chemoprevention and nutrition in cancer. Applicants must be U.S. citizens or permanent residents and must have a Ph.D., M.D., or D.V.M. degree. For application forms, contact: **Dr. Thomas Slaga, Director, U. T. Science Park-Research Division, P.O. Box 389, Smithville, TX 78957. Telephone: 512-237-2403. We are an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION in Lipids/Carbohydrates available immediately. The focus of the research is to understand the reactions and regulation of the lipid-linked glycosylation pathway using somatic cell mutants. The research will include use of steady-state labeling, *in vitro* reactions, and separation techniques already available in the lab. Experience in lipid or carbohydrate biochemistry and cell culture is desirable. Funding available for U.S. citizens and permanent residents only. Send curriculum vitae and names of three references to: **Dr. S. S. Krag, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.**

A **POSTDOCTORAL POSITION** and a **RESEARCH ASSOCIATE** position are available to study the mechanism of peptide hormone-regulated growth and differentiation of hematopoietic cells. Candidates must have a Ph.D. (or equivalent) and research experience in cellular and molecular biology. Experience in hematology is desirable. Send curriculum vitae to: **Dr. Wei Dai, Division of Hematology/Oncology, University of Cincinnati College of Medicine, ML-508, K-Pavilion, 231 Bethesda Avenue, Cincinnati, OH 45267. An Equal Opportunity Employer.**

NATIONAL INSTITUTES OF HEALTH NATIONAL CENTER FOR RESEARCH RESOURCES VETERINARY RESOURCES PROGRAM

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 to EEO recruitment efforts. Consideration is limited to citizens of the United States. APPLICATIONS MUST BE POSTMARKED BY July 17, 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

NEW ENGLAND CAREER OPPORTUNITIES

STRUCTURE-BASED DRUG DESIGN = Discovery With No Limits.

The story of rapid discovery at Vertex Pharmaceuticals Incorporated is all about advanced techniques combining the disciplines of biology, chemistry and biophysics. To harness the power of structure-based rational drug design, we've created a "discovery with no limits" work environment. Our team of top scientists and researchers merge aggressive business initiatives with accelerated clinical programs. What results is the production of novel therapeutics that play a key role in the treatment of many diseases including multidrug resistance in cancer, hemoglobin disorders, inflammation, viral diseases, organ transplant rejection and autoimmune diseases. If your potential has no limits, make a novel discovery today: discover Vertex Pharmaceuticals.

CELLULAR IMMUNOLOGIST

We are seeking a Cellular Immunologist to join the Immunology and Cell Biology group. The successful candidate will have expertise in cellular and biochemical methods applied in investigations of lymphocyte activation, cell-cell interactions, or cytokine functions. Candidates should possess a **PhD** in Immunology with a minimum of 3+ years of post-graduate study and be dedicated to bench level experimentation. Some prior supervisory experience is necessary and industry experience is preferred. A strong publication record is desired.

Test the boundaries at Vertex, and find the rewards only a leader can deliver, such as a stimulating work environment, highly competitive salaries and excellent benefits. Please send your resume to:

**Vertex Pharmaceuticals
Incorporated, Recruiting
Manager, Code SC7/95,
40 Allston Street,
Cambridge, MA 02139-4211;
FAX: (617) 499-7315; email:
recruiting@vpharm.com**
Equal Opportunity Employer.



VERTEX PHARMACEUTICALS INCORPORATED
We're Not Leaving Success To Chance.



Integrative Clinical Research in Neurodegenerative Disease:

Faculty Positions:

Clinical Researcher in Neurology
Neuropsychology (Psychiatry)
MRI Imaging Physicist

New opportunities for the integration of clinical research in neurology, psychiatry, and imaging science have emerged as a result of the School of Medicine's Strategic Plan. A key focus of this Plan is in neurodegenerative diseases. Considerable effort has already been made to expand relevant basic research. The School is now in a position to develop related clinical research, building on existing strengths in its Alcohol Research Center, active neurological research programs in gait and balance, expertise in imaging science, and the acquisition of a new MRI scanner. This new MRI has echo-planar capability that permits functional imaging, and considerable time of use has been dedicated to research.

We are thus seeking faculty for three **tenure-track positions**. While each is expected to provide unique contributions, ideally the faculty will constitute a team dedicated to the study of neurodegenerative disease through the application of contemporary imaging science.

- **Neurologist:** a clinical researcher who would have particular interest in using imaging as a major component of his/her research program in neurodegenerative disease. Examples include a clinical scientist with experience in behavioral neurology, Alzheimer's or other dementing illness, or motor disorders such as Parkinson's disease.

- **Neuropsychologist:** an individual expected to develop an independent research program with broad interests in cognitive neuroscience, preferably with experience in activation procedures, who could develop paradigms for the systematic application of MRI and other techniques to the assessment of neurodegenerative disease. This could include for example, analysis of the progression of dementia from causes such as alcoholism.

- **MRI imaging physicist:** an imaging scientist with an active research program, whose expertise will be central to the implementation of projects initiated by the neurologist/neuropsychologist through the configuration of equipment and development of software essential for functional imaging studies.

Please send curriculum vitae, description of research interests and a list of at least three references to:

**Neurodegenerative Diseases Search Committee
Medical Dean's Office, MC-1920
University of Connecticut School of Medicine
263 Farmington Avenue
Farmington, CT 06030-1920**

(Search Code 95-130)

*AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY
EMPLOYER. M/F/Pw/D/V*

POSITIONS OPEN

POSTDOCTORAL POSITION

Natural Peptide Ligands For Thymic Selection
The University of Chicago

Immediate position to identify MHC bound peptides which are recognized during the positive and negative selection of CD8+ T cells. Studies will involve the HPLC purification of peptides identified in bio-assays and sequencing using Edman degradation and MS/MS technology. A background in protein/peptide chemistry is essential and knowledge of immunology desirable. Please send curriculum vitae and names of three referees to: Philip G. Ashton-Rickardt, Ph.D., Gwen Knapp Center for Lupus and Immunology Research, The University of Chicago, 924 East 57th Street, 4th Floor, Chicago, IL 60637-5420. Telephone: 312-702-4360; FAX: 312-702-1576. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH POSITION UNIVERSITY OF ILLINOIS

Biomedical Magnetic Resonance Laboratory

POSTDOCTORAL POSITION available in synthetic organic chemistry. Experience in cascade polymer and/or macrocyclic chelate synthesis preferred. Operational experience of NMR spectrometers required. Project develops biomedical applications of cascade polymers. Contact: Dr. Erik Wiener, University of Illinois, Biomedical Magnetic Resonance Laboratory, 1307 West Park Street, Urbana, IL 61801. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

A POSTDOCTORAL POSITION is available to study molecular mechanisms that will lead to translational studies of neoplastic cellular resistance to anticancer drugs. A major focus is on the genetics and characterization of a recently cloned multidrug resistance gene and on molecular mechanisms of resistance to idarubicin. Applicants should have expertise in cell/molecular biology and gene cloning and expression. Send curriculum vitae and the names and addresses of three references to: Dr. Douglas D. Ross, University of Maryland Cancer Center, Room 9-015 BRB, 655 West Baltimore Street, Baltimore, MD 21201. Telephone: 410-328-3685; FAX: 410-328-6559. Email: DROSS@umc01.umcc.ab.umd.edu. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION is immediately available to study: 1) intracellular localization of specific heat shock proteins (HSPs); 2) possible impact of abscisic acid (ABA) on the induction and synthesis of HSPs; and 3) possible impact of ABA on heat stability of cellular membranes. Demonstrated expertise in protein biochemistry and molecular biology required. Experience in plant physiology and electron microscopy desired. Send curriculum vitae, statement of research experience, and three letters of recommendation to: Dr. Zoran Ristic, Department of Biology, University of South Dakota, Vermillion, SD 57069 USA. Email: zristic@charlie.usd.edu. Screening to begin August 15, 1995. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION

BROWN UNIVERSITY

DIVISION OF BIOLOGY AND MEDICINE

Position available for individual interested in areas of protein structure-function, gene structure and regulation, protein-nucleic acid interactions, or molecular mechanisms of recombination. Previous experience with (or desire to learn) protein chemistry, nucleic acid biochemistry, DNA cloning, genetics or *in vitro* systems.

Please send curriculum vitae with desired starting date and list of three references to: Arthur Landy, Brown University, Box G-J360, Providence, RI 02912.

Brown University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF TEXAS MEDICAL BRANCH GALVESTON

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

POSITIONS OPEN

POSTDOCTORAL POSITIONS AVAILABLE IN BIOCHEMISTRY/MOLECULAR BIOLOGY

The University of Michigan is seeking highly motivated, creative scientists to fill two POSTDOCTORAL POSITIONS. Preference will be given to candidates who can join us prior to July 31, 1995. Applicants should possess a Ph.D. with expertise in Molecular Biology and/or Biochemistry with demonstrated research excellence and strong written and oral communication skills.

Research will investigate transcriptional regulation of protein kinase C isoenzymes in human skin and their participation in the regulation of cellular growth and differentiation. Studies will focus on cloning and characterization of the promoter for human PKC- η , and its regulation by tissue-specific and differentiation specific transcription factors.

Send curriculum vitae to: Dr. Gary J. Fisher, Department of Dermatology, University of Michigan, 1301 East Catherine, Kresge I, R6558, Ann Arbor, MI 48109-0528. Email: cmhill@imap.itd.umich.edu; FAX: 313-747-0076. *The University of Michigan is a non-discriminatory, Affirmative Action Employer.*

MOLECULAR BIOLOGY

POSTDOCTORAL RESEARCH ASSOCIATE to study the regulation of gene expression during male germ cell differentiation. Projects include, but are not limited to, RNA-protein interactions that control translation and cellular localization of stored RNAs and the roles of the nuclear matrix and cytoskeleton in mRNA regulation. Background in molecular genetics desirable. Send curriculum vitae and names of two references to: Norman B. Hecht, Biology Department, Tufts University, Medford, MA 02155.

POSTDOCTORAL POSITION: Two positions are available in the area of neuropeptide control of development. The research will focus on the characterization of insect neuropeptide genes. Significant experience in molecular biology methods, especially sequencing, protein expression systems, and *in situ* hybridization are necessary. Submit application to: Dr. W. E. Bollenbacher, Department of Biology, CB No. 3280 Coker Hall, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3280. Telephone: 919-966-2631; FAX: 919-962-1284; Email: wbollenb@email.unc.edu. *The University of North Carolina at Chapel Hill is an Affirmative Action/Equal Opportunity Employer. Women, minorities, and individuals with disabilities are encouraged to apply.*

POSTDOCTORAL POSITION available immediately to study the role of T cells and associated cytokines in modulation of immunity to the Lyme disease agent, *Borrelia burgdorferi*, in mice (see *J. Immunol.*, 154:1170). Familiarity with T cell assays, including cytokine assessment (ELISA and RT-PCR), general tissue culture, and experience with animal models is required. Background in molecular biology would also be helpful. Please send or FAX curriculum vitae and names and addresses of three references to: Dr. Steven P. Nickell, Department of Molecular Microbiology and Immunology, The Johns Hopkins School of Public Health, 615 North Wolfe Street, Baltimore, MD 21205. Telephone: 410-955-2912; FAX: 410-955-0105.

POSTDOCTORAL POSITION in Insect Molecular Biology, responsible for isolation and characterization of digestive enzymes from herbivorous insects. And a POSTDOCTORAL POSITION in Plant Molecular Biology, responsible for transgenic insertion and expression of unique enzymes to enhance plant resistance to insects. Both positions are one year appointments, renewable up to three years; available August 1, 1995. Ph.D. in insect physiology, plant molecular biology or related areas; experience with general molecular biology techniques. Salary \$23,000 per year. Send curriculum vitae, publication list, and names of three references to: Dr. Roxanne Broadway, Department of Entomology, New York State Agricultural Experiment Station, Cornell University, Geneva, NY 14456.

POSTDOCTORAL POSITIONS: Available immediately to participate in ongoing studies of sodium channel structure and of sodium channel subtype expression in the heart. Training in molecular biology/biochemistry required. Send curriculum vitae, description of research training, and names of three references to: Sidney A. Cohen, M.D., Ph.D., Cardiology Section (111C), Philadelphia Veterans Affairs Medical Center, University and Woodland Avenues, Philadelphia, PA 19104. FAX: 215-823-4650; Email: cohens@mail.med.upenn.edu. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

Study of mammalian cellular and HIV DNA replication proteins with respect to mechanism of action, response to antiviral agents and cellular regulation. Viral proteins are generated by expression in bacteria. Procedures involve preparation of model DNA and RNA substrates, monoclonal antibody production, PCR amplification and molecular cloning, protein expression and mechanism analysis of multiprotein systems. Submit a complete curriculum vitae and three references to: Dr. Robert A. Bambara, Department of Biochemistry, Box 607, University of Rochester Medical Center, Rochester, NY 14642.

UNIVERSITY OF MIAMI

POSTDOCTORAL POSITION available (two to four years) to study the molecular pathogenesis of neuromuscular disorders associated with mtDNA mutations. Studies will include biochemical and molecular biology approaches to mammalian and/or yeast cells. Expertise in one of the above areas required. Send curriculum vitae and name/telephone of three references to: Carlos T. Moraes, Ph.D., Department of Neurology, University of Miami, 1501 NW 9th Avenue, Miami, FL 33136. Email: cmoraes@mednet.med.miami.edu.

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

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

POSTDOCTORAL POSITION—Polymer/Organic Chemist. Synthesis of polymers for selective recognition by molecular imprinting. Send résumé and names of three references to: Prof. F. H. Arnold, Division of Chemistry and Chemical Engineering 210-41, 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.*

POSTDOCTORAL POSITION

Available immediately. Immunologist or Biochemist-Immunologist to study mediators of immunologic reactions. Experience with protein purification, T cells and *in vitro* techniques desirable. Please send curriculum vitae and three references to: Dr. Robin G. Bell, J. A. Baker Institute, NYS College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. FAX: 607-256-5608.

POSTDOCTORAL POSITION to study covalent modification of liver proteins by hepatotoxic drug metabolites. Available now for one to two years. Requires strong background in bioorganic, natural products or protein chemistry. Familiarity with stable and radioisotopes (C-14), HPLC-MS/MS and/or organic structure elucidation would be helpful. Curriculum vitae and three letters of recommendation should be sent to: Dr. R. P. Hanzlik, Medicinal Chemistry, University of Kansas, Lawrence, KS 66045.

PITTSBURGH TRANSPLANTATION INSTITUTE

A POSTDOCTORAL FELLOWSHIP is available for studies concerning the regulation of antigen-presenting cell (APC)/function (see e.g., *J. Exp. Med.*, 178:1823, 1994) and the role of donor-derived APCs in transplantation tolerance. Candidates should have a Ph.D. in immunology and/or molecular biology relevant to transplantation science and up to two years of postdoctoral experience. Please submit curriculum vitae and provide three references to: Angus W. Thomson, D.Sc., Research Professor, Pittsburgh Transplantation Institute, W1544 Biomedical Science Tower, University of Pittsburgh Medical Center, 200 Lothrop Street, Pittsburgh, PA 15213 USA. FAX: 412-624-1172.

National Institutes of Health
Public Health Service
Department of Health & Human Services

DIRECTOR NATIONAL INSTITUTE OF MENTAL HEALTH

The National Institutes of Health (NIH) invites nominations and applications for the position of Director, National Institute of Mental Health (NIMH).

The National Institute of Mental Health provides leadership for a national program to increase knowledge and advance effective strategies to deal with problems and issues in the promotion of mental health and the prevention and treatment of mental illness. The Institute conducts and supports research and research training on the biological, psychological, behavioral, epidemiological, legal, and social science aspects of mental health and illnesses. The Director, NIMH, has full responsibility for the implementation of all NIMH activities which include a grant, contract, and cooperative agreement program with significant impact upon the nation's mental health and manpower development. Responsibilities include the management of a staff of over 900 employees in various scientific, technical, and administrative occupations and a FY 1995 budget in excess of \$630 million.

Applicants must have demonstrated progressively responsible experience in the development, administration, and evaluation of scientific mental health programs. Applicants must also demonstrate competence to assume leadership in planning, staffing, directing, coordinating, and allocating resources, and other responsibilities associated with executive leadership of a major national program. Minimum qualification requirements include a degree of Doctor of Medicine, Doctor of Philosophy, Doctor of Osteopathy, or a bachelor's or higher degree in an academic field related to the health sciences. Applicants must further meet established mandatory professional/technical and executive core requirements and additional desirable qualifications.

The individual selected for the position will receive a career appointment in the Senior Executive Service (SES) with an annual salary range of \$97,991 to \$122,040. Physicians may be eligible for a Physicians Comparability Allowance up to \$20,000 per annum. A recruitment bonus of up to 25% of base pay may be available to new employees. Alternately, this position may be filled through an appointment in the Public Health Service Commissioned Corps.

Further information about the position and qualification requirements may be obtained by contacting Pat Middleton at (301) 443-9094. Applicants may submit either a current resume/curriculum vitae, the Optional Application for Federal Employment (OF-612), or any other written format which addresses requirements indicated in the vacancy announcement along with a bibliography and three letters of reference. Send applications to:

**Pat Middleton
Personnel Management Branch
National Institute of Mental Health
Parklawn Building, Room 7C15
5600 Fishers Lane
Rockville, Maryland 20857**

Completed applications must be post-marked by the closing date of the vacancy announcement, September 15, 1995.

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

NIH is an Equal Opportunity Employer

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 immediate openings at our facilities in Wilmington, DE for:

Protein Chemist

The position requires a person with expertise in protein purification and characterization from natural and recombinant sources to support the company's drug discovery programs. The candidate must have a demonstrated ability to design and perform biochemical studies, establish assays and characterize purified proteins. Experience in isolation of a wide range of proteins using different separation technologies will be essential.

A BS/MS in Biochemistry or related field with a minimum of 2-3 years work experience is required. Industrial work experience is preferred.

Sr. Protein Chemist

A candidate is sought to establish a protein chemistry laboratory specializing in the purification and characterization of natural and recombinant proteins. The successful candidate will be an expert in state-of-the-art protein purification technology and its application from analytical scale separation to protein isolation from bioreactor generated material. The candidate must have demonstrated expertise in assay development, enzymology, and protein characterization, as well as excellent written and verbal communication skills and the ability to interact successfully with a large number of scientists in different drug discovery programs.

A Ph.D. in Biochemistry or equivalent degree with a minimum of 3-5 years post-doctoral experience is required. Industrial work experience is preferred.

Sr. Molecular Biologist

A candidate is sought to establish a laboratory focused on the cloning and expression of mammalian genes. The successful candidate must have a well established ability to isolate and characterize genes from cell culture and tissue sources using gene expression and homology cloning. Experience must include the evaluation and characterization of cloned genes by expression in mammalian cells and other biological systems. A demonstrated ability to develop and apply recombinant DNA technologies creatively is required. This position will play a pivotal role in the company's drug discovery program and will carry substantial technical leadership responsibility. It will require the candidate to build mission-oriented collaborative groups to meet corporate objectives. The candidate must be able to interact well with a large number of scientists and have excellent oral and written communication skills.

A Ph.D. in Molecular Biology or equivalent degree with a minimum of 5-7 years post-doctoral experience is required. Industrial work experience is preferred.

DuPont Merck offers a competitive salary and a generous benefits package including 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-SD, 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.

THE SIXTH PRINCETON LIPOSOME CONFERENCE
Cellular Signals, Clinical Trials & Gene Therapy

November 28-29, 1995
Scanticon Conference Center
Princeton, New Jersey

Co-Chairmen: Andrew S. Janoff, Ph.D. (The Liposome Co., Inc.)
Gerald Weissmann, M.D. (New York University)
Marc J. Ostro, Ph.D. (USB Securities)

SESSION 1: GENE THERAPY

Session Chairman: D. Papahadjopoulos, Ph.D. (UCSF)

C. Thomas Caskey, Ph.D. (Merck Res. Labs)
Phil Felgner, Ph.D. (Vical, Inc.)
Pieter Cullis, Ph.D. (Univ. of British Columbia)
Leaf Huang, Ph.D. (Univ. of Pittsburgh)
Inder Verma, Ph.D. (Salk Institute)

SESSION 2: CLINICAL TRIALS I

Session Chairman: Gregory Gregoriadis, Ph.D. (U. of London)

John Hiemenz, M.D. (H. Lee Moffitt Cancer Center)
David Denning, M.D. (N. Manchester Gen. Hosp.)
Gerald Eestermans, M.D. (NexStar Pharm.)
Evan Hersh, M.D. (Arizona Cancer Center.)
Jeffrey Freitag, M.D. (The Liposome Co., Inc.)

SESSION 3: LIPID SIGNALING & CELL ADHESION

Session Chairman: R. Nachman, M.D. (Cornell Univ. Med. College.)

Gerald Weissmann, M.D. (New York Univ.)
Michael Bevilacqua, M.D., Ph.D. (Amgen, Inc.)
James Willerson, M.D. (Univ. of Texas School of Med.)
Yusef Hannun, M.D. (Duke Univ. Medical Ctr.)
Andrew Janoff, Ph.D. (The Liposome Co., Inc.)

SESSION 4: CLINICAL TRIALS II

Session Chairman: Alan Sartorelli, Ph.D. (Yale Univ. School of Med.)

Alan Sartorelli, Ph.D. (Yale Univ. School of Med.)
David Gordon, M.D. (The Liposome Co., Inc.)
Franco Muggia, M.D. (Univ. of Southern California)
Parkesh Gill, M.D. (Univ. of Southern California)
John P. Longenecker, Ph.D. (DepoTech Corp.)
Christine A. White, M.D. (San Diego Reg. Cancer Ctr.)

THE SIXTH PRINCETON LIPOSOME CONFERENCE

November 28-29, 1995

Scanticon Conference Center, Princeton, New Jersey

REGISTRATION FORM

2-Day Conference (includes meals & conference fees) ☐ **Non Profit** \$500 ☐ **All Others** \$740

NAME

TITLE DEPARTMENT

ORGANIZATION

STREET

CITY STATE COUNTRY ZIP

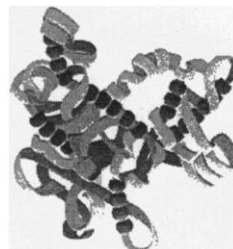
TELEPHONE FAX

Posters: Scientists interested in presenting posters should submit a brief abstract (250 words or less) prior to October 1, 1995.

Payment: Registration fee must accompany this registration form in order for a place to be reserved in your name. Please make check payable to: The Liposome Conference, Inc.

Hotel Reservations: A limited number of rooms have been reserved at the Scanticon Conference Center. To guarantee a room, please call the Scanticon direct at (609) 452-7800. Additional hotels in the area are the Hyatt (609) 987-1234, Marriott (609) 452-7900, Novotel (609) 520-1200, and Holiday Inn (609) 452-2400. We recommend that you make reservations prior to October 1, 1995.

Return to: Lisa Sutton, c/o The Liposome Co., Inc., One Research Way, Princeton, NJ 08540. Telephone: (609) 452-7061, Fax: (609) 520-8250



R&D Systems, the world's leading supplier of cytokine reagents and other related products, invites applications for the following positions.

Cell Biologist/Immunologist/Neurobiologist

The successful candidate will be involved with developing research products and reagents for cytokines and other immunoregulatory molecules and updating annual cytokine catalog. Requires a Ph.D., a minimum of 3 years post-doctoral experience, proven research ability, excellent writing skills, and broad knowledge of cytokines.

Molecular Biologist/Cell Biologist

We are seeking an innovative individual to join an exploratory research group. The principal responsibility of the qualified candidate will be to participate in developing mammalian cell expression systems. The successful applicant must have a Ph.D., and a minimum of 3 years post-doctoral experience is desired. Proven independent research ability and experience in molecular biology and mammalian cell expression are essential. Experience with cDNA library construction and biological systems to identify interacting proteins is preferred.

Research Associate positions in the Cell Biology Department are also available. Research associate requires a B.S. or M.S. in Biology, Chemistry or Biochemistry, a minimum of 2 years laboratory experience in protein purification, cell culture or antibody production.

For consideration, please send your resume and three references to:

R&D Systems, HR Department, Biotech Division,
614 McKinley Pl. N.E., Mpls., MN 55413.

R&D Systems is an Affirmative Action/Equal Opportunity Employer.

R&D
SYSTEMS

Tenure-Track And Postdoctoral Opportunities.

The following research training opportunities are currently available at the National Institutes of Health.

Tenure-Track Positions Assistant Professor Equivalent

Molecular and Cell Biology of the Nucleus Alan P. Wolffe, PhD

Two positions are available for molecular and cell biologists to develop independent research programs in any fundamental nuclear function. These might include chromatin and chromosome dynamics, cell cycle and transcriptional mechanisms, recombination, replication and repair, RNA processing splicing and export. In addition to three letters of recommendation, a two-page statement of research interests and goals should be submitted by October 1, 1995. The successful candidate will be evaluated for tenure within six years. Laboratory of Molecular Embryology (OE-88), NICHD, Building 6, Room B1A-13, 6 CENTER DR MSC 2170, BETHESDA MD 20892-2710.

Postdoctoral Positions

Clinical and Basic Research in Head and Neck Cancer Carter Van Waes, MD, PhD

Combination biologic and surgical therapy of head and neck cancer is under investigation. Preclinical studies to develop approaches for retroviral cytokine gene therapy and inhibition of cell adhesion processes involved in progression of head and neck cancer are underway. Clinical studies combining standard surgical and experimental therapies are being designed. Applicants require fulfillment of residency training in otolaryngology-head and neck surgery and a record of advanced training in a field of basic research. Medical licensure required. Head and Neck Surgery Branch (OE-88), NIDCD, Building 31, Room 3C11, 31 CENTER DR MSC 1419, BETHESDA MD 20892-1419.

Gametogenesis E.M. Eddy, PhD

Genes with stage-specific expression during spermatogenesis are studied to define intrinsic and extrinsic mechanisms regulating development and function of male gametes. Transgenic mice are used to dissect promoter regions and gene knockout mice to define the roles of gene products in meiotic and post-meiotic processes. A strong background in cell and molecular biology and less than five years of postdoctoral experience is required. Laboratory of Reproductive and Developmental Toxicology (OE-88), NIEHS, Building 101, Room C422B, P.O. Box 12233, Mail Drop C4-01, Research Triangle Park, NC 27709-2233.

Infectious Dengue Virus cDNA Clone Barry Falgout, PhD

Basic research on positive-strand RNA viruses, especially flaviviruses is being conducted. Current work involves the development and use of an infectious cDNA clone of dengue virus (type 2) to study basic viral molecular biology and begin developing a live attenuated dengue virus vaccine. Laboratory of Vector Borne Diseases (OE-88), FDA/CBER (HFM-451), 1401 Rockville Pike, Rockville, MD 20842-1448.

Molecular Epidemiology Scott R. Diehl, PhD

New molecular genetic and statistical techniques are being developed and used for gene mapping studies of oral and craniofacial disorders including cleft lip/palate, periodontal diseases and nasopharyngeal cancer. Applicants should possess experience in laboratory molecular genetics, statistics, computer programming or epidemiology and have less than five years of postdoctoral experience. Molecular Epidemiology and Disease Indicators Branch (OE-88), NIDR, Natcher Building, 45 CENTER DR MSC 6401, Room 4AS-49E, BETHESDA MD 20892-6401.

RNA Polymerase Function in *E. coli* Ding Jun Jin, PhD

Transcription mechanisms in *E. coli* are being studied. Important domains or functions of RNA polymerase (RNAP) will be identified by isolation and characterization of mutant RNAPs that have altered functions in transcription, and comparing the biochemical properties of the wild-type and mutant RNAPs at specific steps in the transcription process. Applicants should have experience in biochemistry, molecular biology and/or genetics. Laboratory of Molecular Biology (OE-88), NCI, Building 37, Room 2E17, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

Additional Opportunities

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (wylbur.cu.nih) or the World Wide Web (URL: telnet://wylbur.cu.nih). When connected to NIH, key in ,vt100 for terminal emulation, F5E for initials, and AJL1 for account number. To view tenure track positions, **quit** the **POSTDOC** conference and **join** the **TENURE** conference.

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://www.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (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



**Public Invitation to Participate in a New Project for
Research and Development Technology to Treat and Reuse Waste
using an Oil-Alternative Energy**

*Announced by the New Energy and Industrial Technology Development
Organization on June 30*

In order to promote the research and development of global environmental technology, the New Energy and Industrial Technology Development Organization (NEDO) would like to inform all interested companies and research organizations regarding the research and development project described below for fiscal year 1995. This new project is being undertaken as part of the Research and Development Program on Global Environmental Technology of the Ministry of International Trade and Industry of Japan.

Theme of the Research and Development Project

"Research and Development technology to treat and reuse waste using an oil-alternative energy"

Outline of the Research and Development Work to be Entrusted

In order to respond to problems related to waste treatment and recycling, technology will be developed to use melting furnaces which comprehensively and directly melt waste which have, until recently, been difficult to treat (such as shredder dust and waste that is difficult to burn) at a high temperature for reducing the volume of waste and recycling as resources.

Procedure 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 have previous research and development experience in the field covered by or related to the project and possess the organizational structure, human resources and research facilities required to carry out the project work.
2. The applicant must be in sound financial condition and have the ability to manage its finances and facilities as necessary to smoothly 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 be willing to bear fifty (50)% of the total cost of any work it is awarded under this project.
5. 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 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: Tuesday, July 11, 1995

Time: 13:30 to 14:30

Place: NEDO's Head Office

Sunshine 60 Building, 30th Floor, Room 360

1-1, Higashi-Ikebukuro 3-Chome

Toshima-ku, Tokyo 170 Japan

(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 Japan

Telefax: 03-5992-1184

TENURE-TRACK OR TENURED POSITION

FOR A DEVELOPMENTAL BIOLOGIST AT THE
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
NATIONAL INSTITUTES OF HEALTH

A position is available in the Laboratory of Reproductive and Developmental Toxicology for an outstanding scientist to initiate an independent program of basic research in the field of developmental biology. Applications are invited from candidates with demonstrated potential for creative research in developmental biology, but priority will be given to applicants studying cellular and molecular mechanisms of mammalian development. In addition to establishing an independent program of basic research, the successful candidate will have the opportunity to interact with investigators studying diverse problems in the fields of reproductive biology, developmental toxicology, hormone mechanisms, signal transduction, cell growth and differentiation, apoptosis, gene regulation and cancer biology.

Applications from women or members of minority groups are particularly welcome. The position is available to citizens or permanent residents of the United States. Minimum qualifications are a doctoral degree in the biomedical sciences and three years of postdoctoral experience. Salary will be commensurate with the experience and qualifications of the candidate. Interested parties should provide a curriculum vitae with bibliography, a brief statement of research interests, and arrange for three letters of recommendation to be sent before September 1, 1995 to:

Ms. Norma Daye

**Human Resource Management Branch (HNV114)
National Institute of Environmental Health Sciences
National Institutes of Health, P. O. Box 12233,
Research Triangle Park, NC 27709
(919) 541-7513**

NIEHS/NIH is an Equal Opportunity Employer

Help Us Make The Research Discoveries That Make A World Of Difference.

With over a century of pioneering research behind us, Abbott Laboratories continues to lead the way in new drug and health care discoveries. And as a Fortune 100 company, we continue to offer our professionals career opportunities second to none. Currently, we're seeking an Associate Scientist to join us, and play a key role in tomorrow's health care innovations.

ASSOCIATE SCIENTIST In Vivo

You will participate in designing, conducting and evaluating neuroscience related experiments using behavioral and histological techniques.

We require an MS/MA in Psychology, Pharmacology or Neuroscience, or a BS/BA and 2-3 years of research experience with behavioral techniques. We also require familiarity with small animal stereotaxic surgery, behavioral testing procedures, neuroanatomy and statistics. We prefer experience with histologic, immunohistochemical and neurochemical techniques.

Abbott offers an excellent salary and benefits package, including profit sharing and a stock retirement plan. For consideration, please send your resume with salary history to: **Jessica Wiley, Job #80288, D-583, AP6D-2, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action/Smoke-Free Employer.

ABBOTT LABORATORIES



Quality
Health Care
Worldwide
Since 1888

Experience The Abbott Edge.

POSTDOCTORAL FELLOWS

The Genentech Postdoctoral Program consists of more than 50 Fellows and is a vibrant and intensive environment for advanced scientific training. Postdoctoral Fellows conduct basic research in the areas of our scientific interest, publish in scientific journals, attend and present work at scientific conferences and maintain close ties with the academic community. Several positions are available for outstanding candidates in the fields of:

Cardiovascular Research:

Two positions are available. One position will focus on the regulation of angiogenesis. The successful candidate will have the opportunity to investigate the role of VEGF and other factors in normal and abnormal angiogenesis by molecular, cellular and in vivo approaches. Candidates should have a PhD/MD degree with a strong background in cell biology/molecular biology. An interest in peptide growth factors and vascular biology is necessary. See Science 246,1306 (1989); Science 255, 255 (1992); PNAS 89, 698 (1992); Nature 362, 841 (1993); J. Biol. Chem. 269, 25646 (1994); NEJM 331, 1480 (1994). Manager: Dr. Napoleone Ferrara. **Reference: PDNF.**

The other successful candidate will be responsible for the design and execution of experiments using molecular cloning techniques, embryonic stem cell homologous recombination, characterization of transgenic mice, and studying novel cDNAs. Manager: Dr. David Lowe. **Reference: PDDL.**

Antibody Engineering: A position is available in the Department of Cell Genetics. Qualified candidates should have either a PhD or MD degree with experience in two or more of the following areas: molecular biology, phage display, protein biochemistry or cancer biology. The successful candidate can expect further training and experience in molecular biology, including human Ab phage technology and protein chemistry with exposure to molecular modeling through on-going collaborations at Genentech. See Cancer Research 55 (1995) 63-70. Manager: Dr. Paul Carter. **Reference: PDPC.**

Neuroscience: A position is available in the area of developmental neurobiology. The successful candidate will utilize advanced molecular, cellular, and genetic approaches to identify and study genes that control commitment differentiation and survival of neurons in the central nervous system. See Nature 363, 266 (1993); Science 266,1062 (1994); Neuron 113, 1245 (1994); PNAS 91, 3304 (1994); 1 Cell 80, 95 (1995); Nature 373, 339 (1995). Manager: Dr. Arnon Rosenthal. **Reference: PDAR**

Molecular Biology: A position is available to study receptors and GTP-binding proteins and to identify novel genes that regulate essential cell functions. The successful candidate will have a background in molecular and cell biology, biochemistry and genetics. See Cell 56, 487 (1989); Nature 340, 146 (1989); PNAS 88, 10535 (1991); Nature 360, 161 (1992); JBC 268, 26059 (1993); JI 152, 1347B (1994). Manager: Dr. Avi Ashkenazi. **Reference: PDAA.**

Genentech offers an excellent salary and benefits package which includes child care resources, free health club membership and fully paid medical, dental and vision coverage. Please send your resume to Genentech, Inc., Human Resources, Attn: Reference XXXX (see code in above job descriptions), 460 Pt. San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.

Pew

Latin American Fellows Program

A Program of the Pew Charitable Trusts

The Pew Charitable Trusts, one of the United States' largest private foundations, is sponsoring a program providing support for young scientists from Latin America for post-doctoral training in the biomedical sciences in the United States.

The Trusts will select 10 Fellows for awards in 1996. An award of \$40,000, administered by the sponsoring U.S. institution, will be provided for use by the Fellow for living expenses during a two-year training period. Following the two-year training period, upon notification of the Fellow's return to his or her country, an additional \$35,000 award will be provided for the sole purpose of purchasing equipment and supplies to establish a laboratory at their home institution.

Applicants must have held their Ph.D. and/or M.D. degrees for no more than 5 years as of July 1, 1996. Applicants must not have had previous post-doctoral training outside of their home country. Fellows will be selected on the basis of their promise as outstanding investigators, as well as the scientific merit of their research proposal, their record of training, and how well their interests coincide with their host laboratories in the United States. The Program accepts candidates from Mexico, Central and South America.

To obtain further information and application materials, contact the Nominating Committee Chairman listed for your country. The application deadline is October 1, 1995.

ARGENTINA

Dr. Israel Algranati
Instituto de Investigaciones Bioquímicas
Fundación Campomar
Av. Patricias Argentinas 435
1405 Buenos Aires, Argentina
TEL: 88-40-18 FAX: 865-2246

BRASIL

Dr. Carlos Eduardo Rocha Miranda
Vice President
Academia Brasileira de Ciencias
Rua Anfilofio de Carvalho, 29, 3o Andar
20030-060 Rio de Janeiro, RJ - Brasil
TEL: 220-4794 FAX: 240-4695
e-mail: cerm@abc.impa.br

CHILE

Dr. Mario Luxoro
Facultad de Ciencias, Universidad de Chile
Departamento de Biología
Casilla 653 (Correo Central)
Santiago, Chile
TEL: 678-7226 FAX: 271-2983

MEXICO

Dr. Hugo Aréchiga
División de Estudios de Posgrado
e Investigación
Facultad de Medicina UNAM
Unidad de Posgrado 1er Piso
Ciudad Universitaria
04510 Mexico, D.F.
TEL: 622-0725 FAX: 550-8859

ALL OTHER COUNTRIES

Ms. Silvia Montano
Coordinator
The Pew Latin American Fellows Program
1388 Sutter Street, Suite #805
San Francisco, CA 94109
TEL: 415-476-5116 FAX: 415-476-4113

POSTDOCTORAL POSITIONS

National Institutes of Health
National Center for Human Genome Research
National Institute of Neurological
Disease and Stroke

Postdoctoral research positions are immediately available for individuals interested in joining a multidisciplinary team from the NCHGR and NINDS investigating the molecular basis of Niemann-Pick type C Disorder.

**Dr. Danilo A. Tagle, NCHGR and
Dr. Eugene Carstea, NINDS:**
Positional cloning strategies.

Dr. Melissa Rosenfeld, NCHGR:
YAC complementation cloning.

Dr. William Pavan, NCHGR:
Murine NPC model.

Candidates should hold a MD and/or PhD and have less than 5 years postdoctoral experience. *Please send a CV with bibliography, statement of research interests and the name of 3 references by July 28, 1995 to:*

**NPC Search, NCHGR/NIH
Building 49, Room 3A14
49 Convent Drive MSC 4470
Bethesda, MD 20892-4470
Fax: 301-402-4929**

NIH is an Equal Opportunity Employer



Science And Technology Administration

OFFICE OF GRANTS ADMINISTRATION AND RESEARCH SERVICES

Associate Director

The Office of Grants Administration and Research Services seeks a creative administrator to assist the Executive Director in developing and administering the Medical Center's sponsored programs.

Responsibilities: Under the supervision of the Executive Director, the Associate Director will introduce and maintain innovative and flexible procedures to coordinate grants, contracts, and other externally funded agreements and applications; initiate programs to promote and facilitate faculty participation in sponsored research activities; assist faculty with proposal preparation; negotiate awards and project management issues with sponsors; develop and present workshops on sponsored programs; manage the department's microcomputer-based information systems; prepare reports for the medical center; and coordinate the department's personnel-related functions.

Qualifications: Master's degree in Life Sciences; Doctoral degree preferred. At least 5 years of high level executive grants management experience, preferably in an academic setting. Demonstrated experience with contemporary electronic data management and on-line communication systems, budget management, staff development, and expertise in implementing policies and regulations of government and private agencies. Strong organizational, interpersonal, and communication skills are required with the ability to manage diverse responsibilities simultaneously.

Applications: Include a cover letter describing relevant experience, research administration career goals, salary requirements, availability, a current resume, and three professional references. Submit all application materials to Ms. Joan Harmon, Human Resources Department, New York University Medical Center, 550 First Avenue, New York, NY 10016. EOE/AA.

WHERE EXCELLENCE IS A WAY OF LIFE.

DEPARTMENT OF MOLECULAR BIOLOGY Faculty Positions

Tenure-track and tenured full-time positions are available at the Assistant, Associate and Full Professor levels in the Department of Molecular Biology, University of Medicine and Dentistry of New Jersey-School of Osteopathic Medicine. Applications are invited from candidates utilizing modern technologies to study issues applicable to the human condition. At this time the Department is especially interested in individuals whose research is in the area of microbial pathogenesis, the molecular biology of aging and cancer.

- The successful candidate will be expected to develop an independent, extramurally funded research program and participate in the teaching of Osteopathic Medical students and Graduate students.
- Individuals seeking senior-level positions must show a track record in research. Exceptional individuals at this level will have the opportunity to recruit and build divisions within the Department.
- Exceptional salary, start-up and support packages are available to the successful candidates.

Interested individuals should send their curriculum vitae, a statement of research interests, and the names of three individuals willing to write a letter of reference to: **Sal Caradonna, Ph.D.**

Chair, Department of Molecular Biology, UMDNJ-School of Osteopathic Medicine, Two Medical Center Drive, Stratford, New Jersey 08084. Web Address: www3.umdj.edu/~leean/molebio.html.



UMDNJ, NJ's University of the Health Sciences, is an Affirmative Action/Equal Opportunity Employer, M/F/D/V, and a member of the University Health System of New Jersey.

Postdoctoral Position, Molecular Virology

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



St. Jude Children's
Research Hospital

Dr. Yoshihiro Kawaoka
Dept. of Virology and
Molecular Biology

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

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

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



Temple
University
School of Medicine

DIRECTOR Neurotrauma Research

The Department of Neurosurgery, Temple University School of Medicine, is seeking an individual to direct a laboratory program in head injury research. The candidate should have a PhD, at least two years of postdoctoral training, and an excellent publication record. Training in molecular biology and experience in head injury research are preferred. Salary support guaranteed for three years. Academic rank commensurate with experience. Please send resume with the names, addresses and phone numbers of three references in three weeks to: **Raj K. Narayan, MD, Professor and Chairperson, Department of Neurosurgery, Temple University School of Medicine, 3401 N. Broad Street, Philadelphia, PA 19140.**

Temple University School of Medicine is an affirmative action/equal opportunity employer and strongly encourages applications from women and minorities.

WORK WITH WORLD-CLASS RESEARCH SCIENTISTS

SENIOR RESEARCH MICROBIOLOGIST NATURAL PRODUCTS SECTION

At Wyeth-Ayerst Research, we're meeting the challenges of a new decade and the next century by building upon our strengths and creating an environment that fosters a more dynamic Research and Development organization. As a leader in the research and development of therapeutic compounds, our drugs have been instrumental in the treatment of infectious diseases, cancer, cardiovascular and central nervous system diseases.

A position for a microbial biochemist/physiologist is available. This individual will be a specialist in microbial fermentation and will conduct research to elucidate the biosynthetic pathways of novel metabolites as well as direct fermentation and biotransformation studies to generate new analogs. Experience in the optimization of medium and environmental conditions to enhance the productivity of secondary metabolites is highly desirable. Various classes of organisms producing interesting compounds will be emphasized. Candidates should have a Ph.D. degree in Microbiology or a related discipline with at least 9-11 years of relevant experience.

This position emphasizes strong interactions with a staff of highly experienced research scientists and presents a valuable opportunity to acquire a broad background in a multidisciplinary pharmaceutical discovery environment.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Interested applicants may send resumes to: **Wyeth-Ayerst Research, HR Dept. 1224, 401 Middletown Rd., Pearl River, NY 10965.** Or you may fax your resume directly into our centralized Research resume database at (610) 989-4854. Principals only. Equal Opportunity Employer, M/F/D/V.



Leading The Way for a Healthier World

Postdoctoral Opportunities

STATE UNIVERSITY OF NEW YORK AT STONY BROOK

Several outstanding research opportunities are currently available through Center for Biotechnology funding at the University at Stony Brook. Faculty members seek postdoctoral associates with the following research foci.

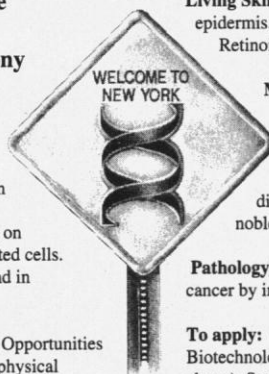
Biochemistry & Cell Biology/J. S. Trimmer - Biochemical characterization of the subunit composition of voltage-gated ion channels in developing and adult brain and heart. Effects of differential subunit interaction and posttranslational processing on activity, abundance and localization of ion channels in transfected cells. Targeting and segregation of ion channels in excitable tissue and in transfected cells.

Biological Chemistry and Bioengineering/G. D. Prestwich - Opportunities for study of ligand-protein interactions by biochemical and biophysical methods include: hyaluronate derivatives and cellular receptors, phosphoinositide receptors, and enzymes of prenyl transfer sterol biosynthesis.

Chemistry/B. Chu - DNA capillary gel electrophoresis with FRAP microscopy. Experience in light scattering, synchrotron SAXS, sans and rheometry desirable.

Chemistry/S. McN. Sieburth - Design and synthesis of biologically active small molecules: new methods for synthesis, protease inhibitors, SAR.

Computer Science/P. Mishra - Software development for medical user interfaces. Candidate must have Computer Science Ph.D. with strong software and user interface development experience. One year's work experience in medical informatics with medical imaging applications is required.

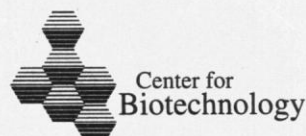


Living Skin Bank/M. Simon - Differentiation of and metabolism in epidermis. Molecular biology. Lipid biochemistry and signal transduction. Retinoids and differentiation.

Magnetic Resonance Imaging/M. E. Wagshul - Development of functional magnetic resonance imaging techniques using inhaled laser-polarized noble gases. MRI of the airways and pulmonary system. Investigation of imaging characteristics and contrast mechanisms in various experimental models of pulmonary diseases in dogs. Design and construction of gas delivery systems for noble gas imaging.

Pathology/G. Nuovo - Analysis of gelatinase and TIMP expression in breast cancer by in situ PCR.

To apply: Send curriculum vitae and three letters of reference to: Center for Biotechnology, University at Stony Brook, Attn: Faculty Member name (from above), Stony Brook, NY 11794-5208. If applying to more than one faculty member, please submit separate applications.



The Center nurtures cooperative research among academic and industry scientists to accelerate basic discovery and the rapid transfer of new technologies to the marketplace. Sponsored by the New York State Science & Technology Foundation. University at Stony Brook is an Equal Opportunity Employer. Female and minority applicants are encouraged to apply.

VISITING INVESTIGATOR PROGRAM

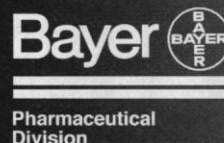
NATIONAL CENTER FOR HUMAN GENOME RESEARCH NATIONAL INSTITUTES OF HEALTH

The Visiting Investigator Program provides tenured or tenure-track faculty level scientists from outside the NIH with the opportunity to spend a 3 - 12 month period at the National Center for Human Genome Research (NCHGR) laboratories and clinics at the NIH. Visiting investigators can use their stay at the NCHGR to learn new technologies, develop research collaborations, or pursue sabbatical research projects. Basic and clinical genetic researchers and social scientists may access the Center's laboratories, core facilities, clinics, and training programs for investigating human genetic disease, including the social implications of genetic research. Partial funding of salary support is available, as well as funding for research related expenses while at the NIH. Project proposals planned for one year are preferred in order to enhance the possibility of accomplishing research objectives. A curriculum vitae and a supporting letter from the candidate's department head (or equivalent individual) must accompany the application. *No incomplete application will be submitted for committee review.* Applications for the cycle beginning January 2, 1996 must be received by September 1, 1995.

For application materials and information, contact:

Betty Wolf-Ledbetter, Director
Visiting Investigator Program, NIH/NCHGR,
Building 9, Room 1E106
9 Memorial Drive MSC 0950, Bethesda, MD 20892-0950
Fax: 301-402-2440
E-Mail: vip@nchgr.nih.gov

Women and minority candidates are strongly encouraged to apply.



Bayer Corporation, Pharmaceutical Division, located near Raleigh, NC is seeking to establish a new research team specializing in the area of virus inactivation in process development to meet the needs of our expanding Biological Products business. This immediate opening exists in our growing Technology Department—a multidisciplinary, team-oriented process sciences group responsible for developing and applying new technology to the purification of therapeutic proteins.

TEAM LEADER, VIROLOGY RESEARCH AND DEVELOPMENT

This Senior Staff Scientist position will be responsible for recruiting and establishing a new team, dedicated to the research and development of novel methods of viral detection and inactivation. As a leader in the field of virology, the incumbent will represent the company's achievements both in external presentations and publications. Requires a Ph.D. in Virology, Biochemistry, or a related science plus at least 10 years of experience in virology, preferably with both academic and industrial experience plus a proven publication record. Supervisory experience is required.

This position offers an attractive compensation package commensurate with qualifications. Send resume to: **Human Resources Manager, Bayer Corp., PO Box 507, Clayton, NC 27520.**

An Equal Opportunity Employer M/F/D/V.

**SYMPOSIUM ON THE NEUROVIROLOGY AND
NEUROIMMUNOLOGY OF SCHIZOPHRENIA
AND BIPOLAR DISORDER**

*Sponsored by the Stanley Neurovirology Laboratory of the
Johns Hopkins University School of Medicine
and the
Theodore and Vada Stanley Foundation*

**November 3 and 4, 1995
Marriott Hotel at BWI Airport
1743 West Nursery Road
Baltimore, Maryland 21240**

The goal of the meeting is to bring together researchers from diverse fields who are interested in the role that infectious agents and the immune response may play in the etiology of schizophrenia and bipolar disorders. Subjects to be discussed include:

- *viral models of CNS functional pathology
- *the effects of infectious agents on dopamine, serotonin and other neurotransmitters
- *viruses as triggers for immune dysfunction leading to psychiatric morbidity
- *antiviral properties of antipsychotic drugs and other psychopharmacological aspects
- *epidemiological aspects of schizophrenia and bipolar disorder which are consistent with an infectious etiology

Presentations will be brief oral talks and poster sessions. There is no registration fee for this meeting.

Plenary speakers will include:

Krister Kristensson, M.D., Ph.D., Professor of Neuroscience, Karolinska Institute, Stockholm, Sweden

Michael B.A. Oldstone, M.D., Head, Division of Virology, Scripps Research Institute, La Jolla, California.

To obtain registration forms please contact Ann Cusic either by phone, fax or E-mail at the following:

Phone: 410-955-3271

Fax: 410-614-1491

E-mail: acusic@welchlink.welch.jhu.edu

**DIRECTOR
W.M. KECK OBSERVATORY**

The University of California and the California Institute of Technology together formed the California Association for Research in Astronomy (CARA) to construct and operate the W.M. Keck Observatory. CARA provides oversight of the operation of the W.M. Keck Observatory and its related equipment, instrumentation, support facilities, and infrastructure through its Board of Directors. The CARA Board seeks a Director for the Observatory. The Director reports to the CARA Board and is responsible for directing the operations of the Observatory within budget so as to maximize its readiness and effectiveness for scientific research. To this end, the Director is responsible for recruiting and maintaining a high-quality technical and administrative staff, for developing an annual budget for review and approval by the CARA Board, and for developing and keeping current both short-range and long-range plans for the Observatory, including maintenance of existing capabilities, prospects and plans for upgrading the facilities and instruments, and staff projections. The Director oversees the scheduling of the telescopes for science and engineering so as to meet the scientific goals of the user community and acts as the primary interface between the Observatory and the community of users. In addition, the Director must maintain good communications with and be responsive to the CARA Board, the Science Policy Committee, the University of Hawaii, and NASA and other external organizations to ensure that the Observatory is meeting the needs and desires of the scientific community. The Director is also responsible for community and public relations.

MINIMUM QUALIFICATIONS: Ph.D. in astronomy or related field or equivalent relevant experience. Experience in managing a scientific research facility and working in a team-oriented environment is also required. The Director must also be skilled in written and oral communications and have the ability to work collaboratively among varied constituencies toward consensus. **SALARY RANGE:** Dependent on background and experience, to be negotiated. **STARTING DATE:** Approximately July 1, 1996.

GENERAL INFORMATION: The Director will be resident at the Keck Headquarters in Hawaii. The second Keck 10-m Telescope will go into operation in 1996. The staff of the Keck Observatory is about 60 people at present. The initial term of appointment will be from three to five years and is renewable; the Director will be reviewed periodically. Requests for further information should be directed to Dr. Joseph S. Miller, Lick Observatory, University of California, Santa Cruz, CA 95064. **APPLICATIONS:** Application together with the names of three references are due on November 1, 1995. They should be sent to the following address: **Keck Observatory Director Search, % Ms. Elaine Stamman, University of California Office of the President, 300 Lakeside Drive, 18th Floor, Oakland, CA 94612-3550.** CARA is an Equal Opportunity/Affirmative Action Employer

RECRUITMENT ADVERTISERS

SAVE 25%

Running your recruitment ad once may not be enough. Place the same ad again within the next eight issues and get 25% off your second insertion.

- Get more attention
- Get more value
- Get more applicants

Reach the global scientific community you need to maximize your recruitment efforts. **SCIENCE** does it bigger, better and at greater savings for you.

In the U.S., call
Janis Crowley (212) 496-7704
or fax (202) 682-0816
In Europe, call
Gordon Clark
+44 01223 302 067
or fax +44 181 556 7527

**Division Chief
Environmental Processes Division
NOAA/NMFS/NEFSC,
Sandy Hook, NJ**

NMFS seeks a Division Chief to direct an interdisciplinary research program focused on the environmental and anthropogenic factors affecting living marine resources in U.S. coastal waters. The chief also directs the Center's aquaculture research program. From the new state-of-the-art James J. Howard Marine Sciences Laboratory at Sandy Hook, NJ, the chief leads a staff of 115 at four labs in coordinated laboratory and field studies involving fishery ecology, environmental quality, aquaculture, oceanography, and marine environmental chemistry. Specialized facilities for fishery ecology and environmental chemistry research are at the new Howard laboratory in Sandy Hook, and for aquaculture are in Milford, CT. The Division also operates two coastal research vessels. The chief must have a demonstrated ability to build and direct interdisciplinary research programs; to develop programs to attract academic and other collaborators; and to manage a large science organization. Ph.D. preferred. Must be a U.S. citizen. Salary range: \$72,901- 94,744. Contact: **Kathryn McArthur, EASC/EC22, 200 World Trade Center, Norfolk, VA, 23510, (804) 441-6876.** The U.S. Department of Commerce is an EEO/AA employer. Closing date is July 31, 1995.

**ELECTRON MICROSCOPY
RESEARCH TECHNICIAN**

National Institutes of Health, Public Health Service, Laboratory of Viral Diseases, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD, is seeking an electron microscopy research technician to perform ultrastructural studies of virus/cell interactions. Experience in routine TEM procedures: tissue preparation and fixation, ultramicrotomy and darkroom work is required. Additional experience with immunoelectron microscopy, cell culture and protein analysis would be helpful. In addition to their research duties, the successful candidate would be responsible for the day-to-day maintenance of equipment, materials, and supplies. Position available immediately: Microbiologist/Biologist (GS-9/11). Salary dependent on qualifications and experience: GS-9, \$29,898 - \$38,869; GS-11, \$36,174 - \$47,025. Send OF-612 or resume and list of references and college transcripts to:

**NIAID Personnel Office
NATIONAL INSTITUTES
OF HEALTH
9000 Rockville Pike
Bldg. 31, Room 7A27
Bethesda, Maryland 20892**

NIH is an Equal Opportunity Employer

**POSTDOCTORAL FELLOWSHIPS
IN MOLECULAR AND CELL BIOLOGY
AT THE NIH**

Postdoctoral Fellowships are available in the Genetics and Biochemistry Branch, NIDDK, NIH. The Branch is similar to a small academic department and has excellent laboratory facilities. The intramural program of the NIH offers an outstanding research environment. The Branch is located on the main intramural campus of the NIH in Bethesda, Maryland, a 20 minute ride from Washington, D.C.. Applications are invited from individuals of the highest caliber with Ph.D., M.D., or M.D., Ph.D. degrees. Physicians may participate in either the NIH Interinstitute Endocrine or the NIH Interinstitute Medical Genetics Training Programs. Current research interests of the staff with positions available include:

-The targeting of proteins to the secretory pathway in both eukaryotes and prokaryotes is being studied using a combination of in vivo and in vitro approaches. Current projects focus on the mechanism of signal sequence recognition, the regulation of protein targeting by a new family of GTPases, and the function of recently discovered prokaryotic homologs of components of the eukaryotic sorting machinery. (**Harris Bernstein**)

-Biochemistry and molecular biology of homologous recombination in eukaryotes and prokaryotes, the structure and function of novel triplex DNAs, new methods for gene mapping and cloning (e.g. RARE) and gene targeting in mammalian cells, gene rearrangements in eukaryotes. (**Dan Camerini-Otero**)

-The role of DNA structure in homologous recombination is being investigated. We are studying the kinetics of DNA branch migration and the role of recombination proteins in promoting branch migration. We are also interested in characterizing other enzymes involved in recombination and repair in eukaryotes. (**Peggy Hsieh**)

-Molecular basis of mechanisms involved in hormonal and developmental control of gene expression. The immediate focus is on the transacting factors of the steroid thyroid hormone receptor gene superfamily. Future work will use homologous recombination to target genes of regulatory nuclear proteins. (**Vera Nikodem**)

-The role(s) of small nucleolar ribonucleoprotein particles (snoRNPs) in pre-rRNA processing in vertebrate and invertebrate model systems is being examined using molecular and biochemical approaches. Current work focuses on the interactions between pre-rRNA and both the RNA and protein components of the snoRNPs. (**Brenda Peculis**)

-Current projects involve gene targeting by homologous recombination to generate mouse models of lysosomal storage diseases, development of gene therapy for treatment of neurodegenerative disorders, and investigation of lysosomal enzyme structure and function. (**Rick Proia**)

-The functional role of a family of neural-specific transcription factors, class III POU domain genes, is being investigated using a combination of molecular and embryological approaches in vertebrate embryos. The regulation of anterior-posterior patterning in the early vertebrate embryo is also under investigation. (**Sheryl Sato**)

Interested candidates should send a letter stating their interests, their curriculum vitae and list of publications, and the names and addresses of three references to:

Dr. R. Daniel Camerini-Otero
Chief, Genetics and Biochemistry Branch
Building 10, Room 9D-15
National Institutes of Health
Bethesda, Maryland 20892
Telephone: 301-496-2710

**Dean of the Institute of Technology
University of Minnesota, Twin Cities**

The University of Minnesota, Twin Cities, invites applications and nominations for the position of Dean of the Institute of Technology. The Dean is responsible for providing leadership and helping to focus the intellectual direction of the Institute, for representing the Institute's interests on campus and to external constituencies, for planning and overseeing the development of its academic programs, and for the administration of the Institute, including appointments and budget. The Dean reports to the Provost for Arts, Sciences, and Engineering.

With 40,000 undergraduate and graduate students enrolled, the University of Minnesota, Twin Cities, is one of the largest land-grant universities in the nation. The Institute of Technology is the University's second largest collegiate unit and the state's premier college of science and engineering. It is comprised of the following departments: Chemistry, Geology and Geophysics, Mathematics, Physics and Astronomy, Aerospace Engineering and Mechanics, Chemical Engineering and Materials Science, Civil Engineering, Computer Science, Electrical Engineering, and Mechanical Engineering. The Institute of Technology also includes a number of other programs, including federally funded research centers in such areas as applied mathematics, interfacial engineering, and high performance computing.

The Institute of Technology has 400 faculty members, 4,500 undergraduate students, and 1,900 graduate students. Annual expenditures are \$130 million per year. Of that amount, \$55 million is from state sources and \$75 million is from federal, industrial, and private sources, including more than \$60 million in sponsored research.

The successful candidate must have:

- an earned doctorate or requisite terminal degree in the applicant's area of study
- a record of teaching and scholarly activity commensurate with appointment as a tenured professor in a department of the Institute
- a strong commitment to academic excellence and to high academic standards
- demonstrated ability to work effectively with such groups as faculty, staff, students, alumni, and other external constituencies, including the larger professional scientific and engineering community
- an ability to articulate effectively the University's and the Institute's missions
- a demonstrated commitment to equal opportunity and affirmative action.

Desired qualifications include faculty and administrative experience at a research university and an appreciation for the role of a land-grant university.

The priority deadline for receipt of applications is August 1, 1995, when the search committee will begin its review of applications. Applications will continue to be accepted and reviewed after that date until a new dean is selected. Applications should include a letter expressing interest, a *vita*, and the names, addresses, and telephone numbers of three references. References will not be contacted without the approval of the candidate. Nominations of qualified individuals are encouraged; these should be received in advance of the August 1 deadline. Send to applications and nominations to:

Professor Eugene Fabes
Chair, Search Committee
University of Minnesota
127 Vincent Hall
206 Church Street Southeast
Minneapolis, MN 55455

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Southwestern Medical Foundation presents

MOLECULAR MEDICINE: CYTOKINES IN HEALTH AND DISEASE

October 26-27, 1995

**The University of Texas
Southwestern Medical Center
Dallas, Texas**

This free symposium explores developments in the molecular and cell biology of cytokines in normal and disease states, including immunity, inflammation, hematology and neuroscience.

October 26, 1995

Cytokines: Basic Mechanisms

- William E. Paul, M.D.
National Institutes of Health
- James A. Wells, M.D.
Genentech, Inc.
- James E. Darnell, Jr., M.D.
Rockefeller University
- Gerald Crabtree, M.D.
Howard Hughes Medical Institute

Cytokines in Immunobiology and Infectious Diseases

- Maureen Howard, Ph.D.
DNAX Research Institute of Molecular
and Cellular Biology
- Richard Locksley, M.D.
University of California
San Francisco Medical Center
- Warren Leonard, M.D.
National Heart, Lung and Blood Institute
- Gene Martin Shearer, Ph.D.
National Institutes of Health
National Cancer Institute

October 27, 1995

Cytokines in Autoimmunity and Inflammation

- Charles Dinarello, M.D.
Tufts University School of Medicine
- Anita Roberts, Ph.D.
National Institutes of Health
National Cancer Institute
- Anthony Cerami, M.D.
The Picower Institute for Medical Research
- John Cohen, M.D.
University of Colorado Health Science Center

Cytokines in Neurobiology and Hematopoiesis

- George Yancopoulos, M.D., Ph.D.
Regeneron Pharmaceuticals
- Harvey Lodish, M.D.
Massachusetts Institute of Technology
Whitehead Institute for Biomedical Research
- Kenneth Kaushansky, M.D.
University of Washington
- Donald Metcalf, M.D.
The Walter and Eliza Hall Institute of
Medical Research

For information, contact Wes Norred at UT Southwestern Medical Center

Phone: 214-648-3599

Southwestern Medical Foundation
Endowing the Future of Medicine

Fax: 214-648-3289

**NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF MEDICINE**



Applications are invited for the highly prestigious position of **Lien Ying Chow Professor** in Medicine.

The appointment is for a period of one year, in the first instance. Candidates must be distinguished professors who have established themselves in any area of **Internal Medicine**. The successful candidate is expected to teach and conduct research in his or her area of interest.

Gross annual emoluments will be in the range of S\$133,480 - S\$180,140. In addition, a specialist allowance of 40% of gross monthly salary is payable. Depending upon the length of appointment, other benefits generally include provident fund benefits or an end-of-contract gratuity, leave and medical benefits, passages for appointee and family, settling-in allowance, subsidised accommodation, children's education allowance and an allowance for transportation of personal effects to Singapore.

The Department of Medicine is a department in the Faculty of Medicine. The department has a teaching staff of 32 full-time academic staff members, together with supporting technical and secretarial/office staff. Departmental staff are involved in service, teaching (both undergraduate and postgraduate) and research in the following areas: Cardiology, Clinical Pharmacology, Dermatology, Endocrinology/Metabolism, Gastroenterology, Haematology-Oncology, Nephrology, Neurology and Respiratory Medicine. The annual report of the Department is obtainable on request.

All academic staff will be given a networked personal computer (Pentium or Macintosh Power PC) with access to a Cray supercomputer, UNIX hosts, departmental laser printers, a wide spectrum of software, on-line library catalogue, CD-ROM databases, Televue, INtv and Internet.

Application forms and further information on terms and conditions of service may be obtained from:

**The Director
Personnel Department
National University of Singapore
10 Kent Ridge Crescent
Singapore 0511**

Enquiries may also be sent through **INTERNET** to: **PERJL@LEONIS.NUS.SG**, or through **Telefax: (65) 7783948**



Centro Internacional de Agricultura Tropical
International Center for Tropical Agriculture

invites applications for

DEPUTY DIRECTOR GENERAL - RESEARCH

CIAT is a leading agricultural research institute with a mission to alleviate hunger and poverty, while preserving the natural resource base, in developing countries of the tropics. It is a member of the Consultative Group on International Agricultural Research (CGIAR). CIAT, whose headquarters is near Cali, Colombia, focuses on four commodities: beans, cassava, rice, and tropical forages; and two fragile agroecosystems in Latin America: the hillsides and the tropical lowlands. CIAT works across Latin America, and also has programs in Africa and Asia. The annual budget is about US\$30 million, with 80 internationally recruited senior scientists and 1050 support staff. The successful candidate is to provide intellectual and management leadership for the research program of the Center, identify and develop worldwide inter-institutional research cooperation, and support the Director General in representing CIAT.

Candidates must have a Ph.D. or equivalent degree and at least 10 years of internationally recognized research experience in tropical agriculture; proven experience in the management of interdisciplinary research teams in a project environment; capacity to integrate natural and social sciences; commitment to cooperation with research organizations in developed and developing countries; and proficiency in spoken and written English. Spanish fluency is highly desirable.

Salary and perquisites are internationally competitive.

Applications will be accepted until 15 August 1995. Send curriculum vitae and the names and fax addresses of three referees to:

CIAT Director General, Apartado Aereo 6713, Cali, Colombia.
Fax: (57-2) 445-0273; E-mail: R.Havener@CGNET.COM.

National Institute for Research in Inorganic Materials

POSTDOCTORAL RESEARCH FELLOWSHIP

Applications of several excellent postdoctoral researchers are invited for the NIRIM COE (Center of Excellence) Research Fellowship in FY1996. Applicants are requested to join the COE Project in NIRIM, where search for and synthesis of new denser materials are carried out by using ultrahigh 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 1996 and March 1997. Salary is about \$4000/m. A round trip flight ticket and a fixed moving allowance will be provided. **Application forms** (returnable by Oct. 31, 1995) 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

HIGH-PROFILE ROLES AT THE FOREFRONT OF PHARMACEUTICAL DEVELOPMENT

Welwyn, Herts - UK

The key to SmithKline Beecham's success in the ever-increasingly tough marketplace of pharmaceutical development is dependent on two critical factors - the ability to accomplish change and to do it faster than the competition, continually bringing new products to the market. Consequently, we maintain a substantial investment both in resources and the people we employ. Effective change and people management is vital and, at our impressive R&D facilities in Welwyn, we need two experienced senior managers to take up two high-profile positions within our Toxicology function.

Head of Toxicology

As a member of a worldwide management team, you will establish strategic plans, budgets and scientific direction for Toxicology on global scale. Fronting a multidisciplinary team of around 80 scientists, you will oversee the toxicological evaluation of human pharmaceuticals, play a key role in the development of therapeutic agents and in determining the significance of toxic effects. Additionally, you will provide advice and guidance on compound safety to both external and internal ethical review boards.

A medical or veterinary degree and/or PhD degree, with broad-ranging experience in toxicology, clinical medicine and risk assessment, should ideally be accompanied by specialist expertise in experimental pathology, cell biology, immunology or biochemical toxicology. Key to your success will be your experience of working with clinical colleagues in the interpretation of the relevance of preclinical data in risk assessment. Communication, leadership and influencing skills are crucial and, ideally, you will have experience of drug development at a senior level.

Director, Morphologic Pathology and General Toxicology

Reporting to the Head of Toxicology, you will lead a team of eleven scientists, including pathologists and study directors, and make a significant contribution to the development of therapeutic agents and in investigating toxicological effects elicited by compounds in development. As part of the worldwide management team in Safety Assessment, you will help establish strategic plans for morphological

pathology and general toxicology.

Qualified as a veterinary pathologist, MD pathologist or PhD pathologist, you will be experienced in diagnostic and toxicological pathology within the drug development process with a proven track record of success in the investigation of toxicological effects. Strong managerial skills must be combined with your ability to gain commitment at all levels.

We offer a dynamic, challenging environment which encourages team work, collaboration and personal development. In return for your dedication, you'll receive an outstanding remuneration package including highly-competitive salary, bonus, pension and medical plans, share-matching scheme, profit-related pay and relocation assistance where appropriate.

If you can make a major contribution to our toxicological operations, please send your full career details to our advising consultant, Mrs Kathleen Vail, at Young International Group, Great Valley Corporate Center, 7 Great Valley Parkway, Suite 233, Malvern, PA 19355.

SB
SmithKline Beecham
Pharmaceuticals
Challenging the natural limits.



Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1995-96 for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, and tumor immunology. Training is available in recombinant DNA technology, gene expression, gene therapy, DNA repair, DNA replication, mutagenesis, regulation of cellular proliferation, growth factors, molecular immunology, molecular genetics of cancer, and combined programs. Unique training resources and core facilities are supported by the NCI-designated UNC Lineberger Comprehensive Cancer Center.

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

Candidates must be U.S. citizens or permanent residents. To send for an informational brochure or to apply, with curriculum vitae, three letters of recommendation, a statement of research interests and graduate school records, write to:

Joseph S. Pagano, M.D.
CB# 7295

UNC Lineberger Comprehensive Cancer Center
School of Medicine
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7295

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

We are a leading independent contract laboratory bringing innovative research techniques and pre-clinical testing services to the pharmaceutical, chemical and biotechnology industries as well as to specialized segments of the health care industry.

As a result of continued growth and expansion, we offer the following opportunity:

BUSINESS DEVELOPMENT MANAGER

In this USA-based regional management position, you will be responsible for designing and executing a business plan for your territory. Reporting to the Director, Corporate Development USA, and supported by a head office Marketing and Sales group, your objectives will include maximizing sales to current clients, establishing new clients and market segments, and identifying emerging market needs.

Position requirements include a background in drug discovery and development, with a Masters degree, or preferably a Ph.D. In addition, the successful candidate will have a minimum of 5 years of industry experience in research and/or business management. Ongoing duties will include planning, executing and closing sales, and working with our research staff to target new clients and launch new market-driven services.

Experience working for a CRO and/or in selling research services are definite assets. The successful candidate will have a high degree of autonomy and self-motivation; up to 75% travel will be required.

Interested candidates please

Mail or Fax your resume to:

BIO-RESEARCH LABORATORIES LTD.

87 Senneville Road

Senneville (Montreal), Quebec, Canada H9X 3R3

Att: Director, Human Resources

Fax: (514) 630-8234

We promote equality in the workplace.

We thank all applicants. Only those selected for an interview will be contacted. No telephone inquiries or agencies please.

GLOBAL CAREER OPPORTUNITIES

Carlsberg Laboratory Head of Department of Physiology

MOLECULAR BIOLOGY AND BIOTECHNOLOGY

The Trustees of the Carlsberg Laboratory, invite applications for the position as Professor and Head, Department of Physiology as of **October 1st, 1996**. The department offers opportunities for original research in the genetic, cell biological, physiological and biochemical sciences. By tradition it trains masters and Ph.D. students and provides opportunities for independent postdoctoral research. Together with the Departments of Chemistry and Yeast Genetics of the Carlsberg Laboratory and in cooperation with the Carlsberg Research Laboratory, the department participates in the development of biotechnological applications of molecular biology with emphasis on cereals.

Prior to **September 1st, 1995** applicants are asked to submit a Curriculum vitae including a list of publications and a statement of their research plans to **Professor Carl Johan Ballhausen, Chairman of Search Committee, Kemisk Laboratorium IV, H.C. Ørsted Institutet Universitetsparken 5, DK-2100 Copenhagen Ø.**

First Annual Conference on Recruitment and Retention of Minority Scientists

"Unlocking Opportunities: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries"

26 - 27 October 1995

This is a unique opportunity to be part of an exciting forum where professionals from industry, government, universities and associations will discuss and share strategies related to the recruitment, retention and professional development of minority scientists.

Sponsored By: The American Association for the Advancement of Science

Location: Washington D.C. (Crystal City Marriott, Arlington, Virginia)

Cost*:

- \$340 registration before July 1, 1995
- \$395 registration after July 1, 1995.
- \$285 per person for 2 or more before July 1, 1995.
- \$340 per person for 2 or more after July 1, 1995.

Price includes full conference, opening cocktail reception, continental breakfast and lunch.

(*Does not include hotel accommodations).

For information call: Janis Crowley (212) 496-7704

The conference is supported by a grant from the DeWitt Wallace-Reader's Digest Fund.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN THEORETICAL NEUROSCIENCE

A **POSTDOCTORAL FELLOWSHIP** in theoretical neuroscience is available through the newly formed Center for Theoretical Neuroscience at Baylor College of Medicine. The position will focus on theoretical problems; however, all potential projects will be closely allied with ongoing experiments in laboratories of Drs. John Maunsell and Nikos Logothetis in the Division of Neuroscience at Baylor. Current interests include the role of attention in visual perception, the neural basis for decision-making, and the neural basis for object recognition. The successful candidate will have a strong knowledge in basic neurobiology combined with quantitative background in physics, computing, or engineering. Fellows will receive stipends commensurate with their background and qualifications. Send curriculum vitae, research interests, and the names of three references to: **Dr. P. Read Montague, Division of Neuroscience, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Email: read@bohr.bcm.tmc.edu.**

Baylor College of Medicine is an Affirmative Action/Equal Opportunity/Equal Access Employer.

POSTDOCTORAL FELLOW COMPUTATIONAL NEUROSCIENCE

Available immediately to study the intrinsic physiological properties of the crustacean stomatogastric ganglion. Will perform experiments and model the properties of the neurons using dynamical systems theory. Candidates should have strong background in neurophysiology and mathematics. Send curriculum vitae and names of three references to: **Ron Harris-Warrick and John Guckenheimer, Section of Neurobiology and Behavior, Cornell University, Ithaca, NY 14853.**

REPRODUCTIVE BIOLOGIST/ ENDOCRINOLOGIST

The Department of Ob/Gyn, University of Kansas School of Medicine-Wichita invites applicants for a **RESEARCH POSITION** in The Women's Research Institute to begin immediately. The primary appointment will be in the Department of Obstetrics/Gynecology. Qualified candidates must hold a Ph.D. or M.D., have at least two to three years of postdoctoral training, and be capable of establishing an independent research program in some area of male or female reproductive biology/endocrinology. The successful candidate will have the unique opportunity to join a group of clinical and basic scientists whose research interests include assisted reproductive technology, implantation, ovarian physiology, maternal/fetal well being, biochemical and molecular endocrinology. Academic rank and salary are negotiable. Applicants should submit a curriculum vitae, statement of current and future research interests, and names of three references by October 1, 1995, to: **Dr. Brooks A. Keel, Ph.D., President and CEO, The Women's Research Institute, University of Kansas School of Medicine-Wichita, 2903 East Central, Wichita, KS 67214. An Equal Opportunity/Affirmative Action Employer. Applications are sought from all qualified people regardless of race, religion, color, sex, disability, veteran status, national origin, age, or ancestry.**

SCIENTIFIC PROGRAMMER Howard Hughes Medical Institute

The Howard Hughes Medical Institute (HHMI) is currently seeking a **SCIENTIFIC PROGRAMMER** for our facility at Yale University.

Responsibilities for this position involve working closely with our research team in order to assist in the development and support of the program X-PLOR for structure determination by X-ray crystallography and solution NMR spectroscopy as well as provide information offered on the world-wide web. Other duties include systems administration, maintenance, and upgrading workstations (Hewlett Packard, Silicon Graphics, NeXT, and Macintosh), peripherals, and networks. Requirements for this position include knowledge of at least one of the following areas: biochemistry, X-ray crystallography, or NMR. Extensive UNIX experience and programming in FORTRAN and C are essential.

HHMI offers a salary commensurate with experience and an excellent benefits package. Please forward your résumé, salary requirements and three references to: **Howard Hughes Medical Institute, Yale University, Attn: Axel T. Brunger, 266 Whitney Avenue, BCM5B 434A, New Haven, CT 06520-8114. Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH ASSISTANT

Position available immediately to conduct research on primate cognition and motor behavior. Studies are of particular relevance to Parkinson's disease, Alzheimer's disease, and Attention Deficit Disorder. A degree in Neuroscience or a related discipline is required. Previous experience with non-human primates is strongly preferred. Send letter and curriculum vitae to: **Jay S. Schneider, Ph.D., Department of Neurology, MCP and Hahnemann University, Broad and Vine, Mail Stop 423, Philadelphia, PA 19102.**

SYMPOSIA

SUSCEPTIBILITY AND RISK ASSESSMENT The Third Annual Symposium of the Health Effects Research Laboratory

The Health Effects Research Laboratory of the U.S. Environmental Protection Agency is pleased to announce that its Third Annual Symposium will be held November 6-9, 1995, at the North Raleigh Hilton in Raleigh, North Carolina. This third in the Annual HERL Symposium Series on Research Advances in Health Risk Assessment will focus on known factors affecting the susceptibility of humans, experimental animal models, or cell tests systems to environmental toxicants with the goal of refining risk assessment strategies which must consider variable population response. Protection of the "susceptible individual" is a fundamental goal of environmental regulation. Indeed, it is generally accepted that if the susceptible individual is protected, then the entire population will be protected. The format of the HERL Symposium will include invited platform presentations and contributed poster presentations. For more information, please contact:

**RSD Conference Coordinator
MD-70, Health Effects Research Laboratory
U.S. EPA, Research Triangle Park, NC 27711
Telephone: 919-541-5193; FAX: 919-541-4002
Internet: MEETING\$MAIL@HERL45.
HERL.EPA.GOV**

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

COMPUTER MARKETPLACE

Fig.P for Windows or DOS

The Powerful Data Analysis and Graphics Package.
Call BIOSOFT on (314) 524-8029 for
FREE DEMO DISK
In Europe: +44 (0)1223 368622

Circle No. 42 on Readers' Service Card

MARKETPLACE

FETAL BOVINE SERUM
Triple 0.1um filtered • Certified FMD & BSE Free • USDA Inspected

HIGH QUALITY ATLANTA biologicals LOW PRICES

Call or Fax for Information, Pricing and a FREE Cell Culture Catalog.
FREE Samples and Quantity Discounts are available.

PH: (800) 780-7788 FAX: (800) 780-7374
(404) 446-3336 (404) 446-1404

Circle No. 33 on Readers' Service Card

MARKETPLACE



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. 1 on Readers' Service Card

Custom MAb Production

- Hybridoma Development
- Ascites Production
- In-Vitro Production
- Purification Services
- Labeling • Fragmentation

(518) 537-8000

Circle No. 22 on Readers' Service Card

PARTICLE SIZE STANDARDS

NBS traceable calibration standards and controls. Large assortment of diameters from 0.02 to 2000 µm. microspheres of polystyrene, glass and fluorescent materials. Free catalog available. Toll Free 800-334-3883. In Calif. 415-424-1177. FAX 415-424-1158

Duke Scientific Corporation

P.O. BOX 50005
2463 FABER PLACE
PALO ALTO, CA 94303

Circle No. 10 on Readers' Service Card

L - N M M A
N-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. 32 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. 37 on Readers' Service Card

CUSTOM DNA SYNTHESIS

PURE & SIMPLE

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

* Some restrictions apply. Please call for details.

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. 2 on Readers' Service Card

Marketplace ads continue on page 1970

MARKETPLACE

Custom Antibodies to Peptides & Proteins

Conjugation, Purification and ELISA Titration Available.



BIO-PRODUCTS, INC.

TEL: 1 (800) 481-9737 FAX: 1 (619) 788-9694

Circle No. 43 on Readers' Service Card

High Quality Synthetic DNA

\$1.41 per base

50 nmole scale no-setup charge
48 hour turnaround



Great Valley Corporate Center

279 Great Valley Parkway
Malvern, PA 19355
610-993-9323: phone
610-993-9464: fax
1-800-249-7841

Circle No. 45 on Readers' Service Card

QUALITY CUVETTES!!!

Inexpensive Electroporation Cuvettes
Each sterile package includes a free
pipette for easy sample removal!



1-800-289-2465
FAX: 619-597-9594

Circle No. 34 on Readers' Service Card

"THE COMPLETE
OLIGONUCLEOTIDE
COMPANY"

KEYSTONE

"Are you happy with your
DNA synthesis?"

961 HAMILTON
AVENUE
MENLO PARK
CA
94025

CALL KEYSTONE.

dna@keydna.com

800-788-4DNA

Circle No. 5 on Readers' Service Card

The premium
antibody for
phosphotyrosine
detection is
available from
the laboratory
where it
originated, for
the low price of

PY20

from
**TRANSDUCTION
LABORATORIES**
1-800-227-4063

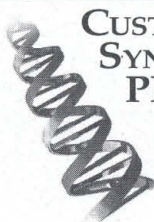
\$100/mg!

Quality
Antibodies
for Signal
Transduction
Research

Circle No. 12 on Readers' Service Card

MARKETPLACE

CUSTOM SYNTHESIZED PNA OLIGOMERS



- Hybridization at low salt to DNA & RNA
- Higher affinity and specificity
- Stable towards nucleases and proteases

CUSTOM PNA SYNTHESIS SERVICE
PerSeptive Biosystems can synthesize the PNA sequence you need:

- Simple strings of A, C, G and T
- Labeled oligomers:

Biotin
Rhodamine
Cyanine
DIGTM
Alkaline Phosphatase
Fluorescein

U.S. and Canada: 1-800-899-5858 • Japan: (03) 3471-8191
France: +33 (1) 34523030 • U.K.: +44 (0) 1923211107
Germany and other locations: +49 (0) 761/45224-0

DIG is a trademark of
Boehringer Mannheim.



PerSeptive Biosystems

Circle No. 47 on Readers' Service Card

\$25 PEPTIDES \$35

125mg
8 res. min. **\$49** >20 mg
>90% pure >50mg
>70% pure

*All peptides include Mass Spec, HPLC, UV Scan
SynPep Corp. Phone: 1-800-899-3436
Custom and 1-510-803-9250
Radiolabeled Peptides Fax: 1-800-899-6534

Circle No. 17 on Readers' Service Card

ONLY DNA

No frills, Just good DNA at very low prices

\$1.60 per base

- No set-up fee
- 48 hour turnaround
- 50 nanomole synthesis

1-800-359-5794 email onlydna@wln.com

Circle No. 11 on Readers' Service Card

DNA PEPTIDES

\$.1.75 /base

- Column Purified
- No setup fee

\$.20 /residue

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

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

Circle No. 15 on Readers' Service Card

The Peptide Engineering Specialist

PeptidoGenic

e mail: pkim@ccnet.com
Fax: 510-371-1156
Voice: 1-800-597-7873

Custom
Peptide: **\$20** /residue/crude/5days

IonSpray MS Service: MS (\$30), LC/MS (\$250)

Circle No. 44 on Readers' Service Card

MARKETPLACE

World leader in Synthetic DNA

DNA E-Mail: Biosyn@aol.com

- 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.

BIO-SYNTHESIS
Tel: 800-227-0627 Fax: 214-420-0442

Circle No. 18 on Readers' Service Card

SWant® Swiss antibodies
P.O. Box 2660

CH-6501 Bellinzona
Fax: +41 92 25 76 08

Antibodies to calcium-binding proteins:
parvalbumin, calbindin, calretinin, S-100
calineurin, calmodulin; Ca-channels;
Ca-exchangers! Fax for free catalogue!

Circle No. 38 on Readers' Service Card

2-D Electrophoresis Services

Fast - Reliable - Custom
1D & 2D Protein PAGE
Kendrick Labs, Inc

1 800 462-3417

Circle No. 19 on Readers' Service Card

CUSTOM PEPTIDES

High quality at unbeatable prices
starting from \$195*

Order with confidence knowing that you'll
get the quantity and purity you require with
no hidden extras.

US: West Coast
Tel: 800 644 1866
Fax: 800 655 1866
US: East Coast
Tel: 800 633 8161
Fax: 800 424 3970



International:
Tel: +61 3 9565 1111
Fax: +61 3 9565 1199
Europe:
Tel: +33 72 41 7039
Fax: +33 78 37 4062

* 10-30 mg, 8-15 residues, unpurified with mass spec. CM 1011

Circle No. 14 on Readers' Service Card

Custom PEPTIDES

Purity >70%, \$20 Res. (offer thro. May)
1st order disc., no setup fee, free HPLC/A.A. analy.

PEPTIDE ANTIBODY: \$250 Rabbit
UNBEATABLE: NO CHARGE IF NO ANTIBODY PRODUCTION
PEPTIDE LIBRARY: from \$150 library
1-800-400-0070 (Tel)
TANA LAB., LC. +1-713 663 7163 (Fax)

Circle No. 26 on Readers' Service Card

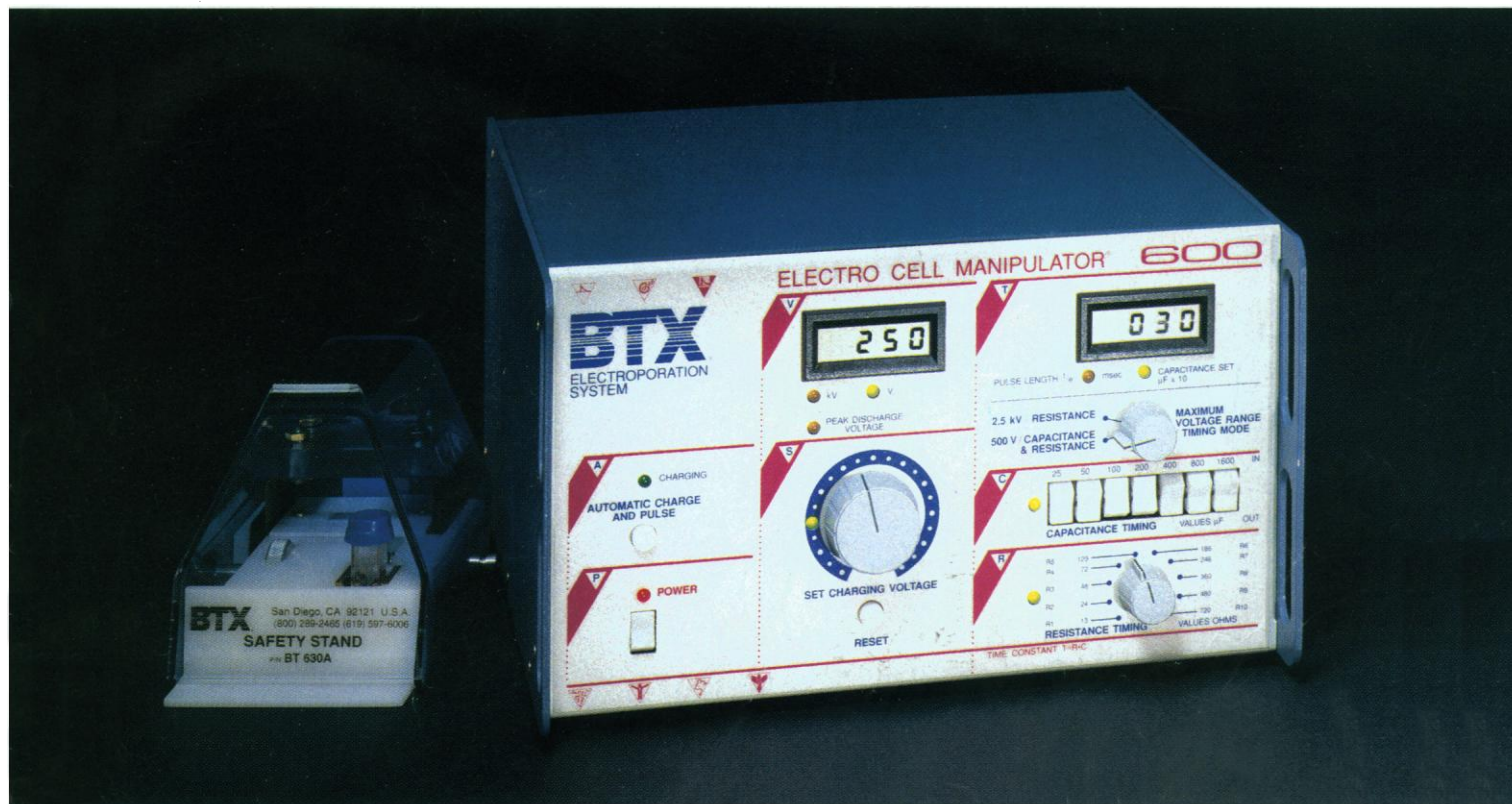
Custom DNA Purified & Delivered in 48 hours

\$5.00 per base • Purified
Guaranteed minimum 100µg

Research Genetics, Inc.
1-800-533-4363

Circle No. 4 on Readers' Service Card

RESEARCHERS AGREE... The BTX ECM[®] 600 meets all the requirements of the ideal electroporation system!



Versatility

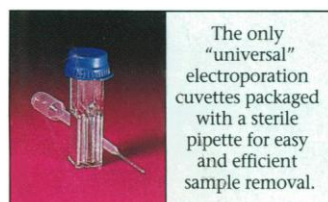
- Electroporates all cell types
- Wide operating range allows researcher to expand limits of experimentation
- Automatic dual monitoring capability in a single unit
- The only system with more than a dozen chamber and electrode choices; ideal for volumes up to 50ml in petri dishes as well as continuous flow applications

Ease-of-use

- Single, self-contained unit; no confusing "add-on" modules - saves lab space
- Easy to learn and use; up and running in minutes, saves technician training time
- Portable, for easy transport to other lab locations
- Toll free technical support
- Free access to the 2700 references in our Electronic Genetics[®] Database

Efficiency

- Capable of generating higher field strengths and producing hundreds more pulse length settings than other widely used systems
- High electroporation efficiencies with the greatest number of cell types
- Two voltage ranges for effortless switching between electroporation of prokaryotic and eukaryotic cells
- Full 2 year warranty



BTX[®]
ELECTRONIC GENETICS[®]

Electroporation. It's not just what we sell. It's what we are.

11199-A Sorrento Valley Road • San Diego, CA 92121-1334 U.S.A.

1-800-289-2465 • (619) 597-6006 • Fax: (619) 597-9594

BTX is a division of Genetronics, Inc.

Circle No. 49 on Readers' Service Card

Distributed in the U.S.A. by: VWR Scientific: 800-932-5000 **Internationally distributed in:** AUSTRALIA: Tel. 02/9757582 BELGIUM, LUXEMBOURG, NETHERLANDS: Tel. 0800/19815 BRAZIL: Tel. 21/592-6642 CANADA: Tel. 800/932-5000 CHINA: Tel. 1/831-3388 EGYPT: Tel. 02/3480526 DENMARK: Tel. 86/10-10-55 FINLAND: Tel. 0/4208077 FRANCE: Tel. 1/44-52-73-75 GERMANY, AUSTRIA: Tel. 06221/30-39-07 GREECE: Tel. 01/646-2748 HONG KONG: Tel. 578-5839 INDIA: Tel. 44/828-3782 INDONESIA/SINGAPORE: Tel. 273-0898 ISRAEL: Tel. 3/917-812 ITALY: Tel. 02/33106630 JAPAN: Tel. 03/3818-5091 KOREA: Tel. 02/561-2431 MALAYSIA: Tel. 03/7031888 MEXICO: Tel. 5/3417764 NEW ZEALAND: Tel. 04/385-7699 POLAND: Tel. 71/554323 PORTUGAL: Tel. 1/458-16-41 SOUTH AFRICA: Tel. 11/789-3932 SPAIN: Tel. 01/3-58-92-24 SWEDEN: Tel. 43-51-30-60 SWITZERLAND: Tel. 061/712-16-16 TAIWAN: Tel. 2/880-2913 THAILAND: Tel. 2/308-0611 UNITED KINGDOM: Tel. 1670/73-29-92

50% MORE OOMPH!

The Centra®-GP8 outperforms other leading benchtop and kneewell systems with a full 50% more separating power on large capacity loads. It accelerates and decelerates rapidly, and with its unique three liter sealed swinging bucket rotor, generates up to 4550 xg on as many as 144 tubes. Plenty of oomph to get big jobs done fast.

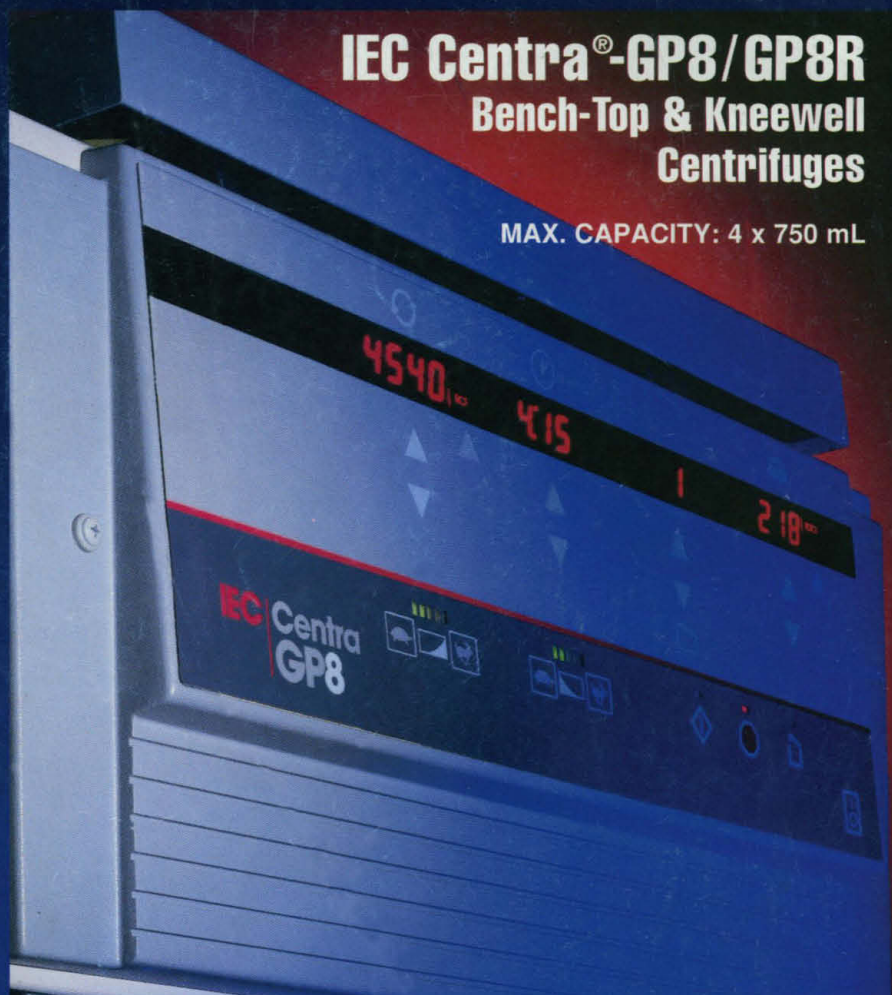
While you enjoy the benefits of faster sample preparation, your operators will also love the GP8 SmartSet™ control system. With features like a simple to understand, glove-compatible Membrane Panel, Program Memory and Rotor I.D. System, the GP8's 50% more oomph also translates into faster, more efficient set-up time and quicker results.

And finally, the GP8 has the same rugged, robust design, quality construction and uncompromising safety which have always set IEC centrifuges apart from the rest.

If you're in the market for a large capacity centrifuge turn to the system that gives you more power, more features and more oomph for the money.

The IEC Centra®-GP8.

The Centra-GP8 is available in refrigerated and ventilated models, and in compact bench-top or under-counter kneewell designs.



IEC Centra®-GP8/GP8R Bench-Top & Kneewell Centrifuges

MAX. CAPACITY: 4 x 750 mL

Increased separating power to boost your sample prep productivity.

Centra-GP8: 4550 xg

Brand B: 3200 xg

Brand S: 2190 xg

TIME →

↑ FORCE

IEC

INTERNATIONAL EQUIPMENT COMPANY

300 SECOND AVENUE, NEEDHAM HEIGHTS, MA 02194, USA
TEL: (617) 449-8060 TOLL FREE: (800) 843-1113 FAX: (617) 444-6743

Quality... ISO 9001 • IEC 1010-2-2 • CFC free • CSA certified *...Safety*

Please call, I'm interested. Circle No. 39
Send literature Circle No. 40