# Proven Better.

GATC GATC

**FIDELITY**<sup>™</sup> DNA Sequencing System

"... in our hands, the FIDELITY enzyme gives us better quality sequence with fewer stops on long runs ... we see the same effect using different plasmid DNA preparations and different primers."

Rahul Warrior, Ph.D. University of Southern California Los Angeles, CA



You, too, can get results like this. Try a FIDELITY" Kit, and if not fully satisfied you will receive full product credit. PROVE IT TO YOURSELF!

For Research Use Only. Not for use in diagnostic procedures. © 1996 Oncor, Inc. FIDELITY is a trademark of Oncor, Inc. Sequenase is a trademark of United States Biochemical Corporation. R.J. North



Sequenase

FIDELITY

plasmid DNA (\*S)

... and another satisfied FIDELITY DNA Sequencing System user.



http://www.oncorinc.com/home techsvc@oncor.com

custsvc@oncor.com



# **Products from PanVera**

# **MESACUP**<sup>TM</sup>

Protein Kinase Assay Measures as Little as 0.01 Units of PKC Activity Non-radioisotopic Detection

# **Protein Kinase C Isozymes**

 $\alpha$ ,  $\beta$ I,  $\beta$ II,  $\epsilon$ ,  $\gamma$ ,  $\zeta$ Recombinant Human Proteins Only \$200 for 20 µg

## **Antibodies to PKC Isozymes**

## Antibodies for Signal Transduction Research

### **800-791-1400** In the U.S.A. & Canada

Phone: 608-233-5050 · Fax: 608-233-3007 E-Mail: info@panvera.com Homepage: http://www.panvera.com/



# PanVera Corporation

545 Science Drive Madison, Wisconsin 53711 USA

Circle No. 45 on Readers' Service Card

### The *"Cold Standard"* in Hematopoietic Culture Reagents

- Methylcellulose-based media for colony assays of hematopoeitic progenitors
- Long-term culture media for assays of the most primitive progenitors
- Pre-selected Sera and Serum Substitutes
- Pre-tested Tissue Culture Supplies

#### ClonaCell<sup>™</sup>-HY

Faster and more efficient than conventional methods for generating hybridomas

HAT selection and cloning of hybridomas are performed in a single step

No more limiting dilutions!

#### StemSep"

The Simpler, Cleaner Alternative

Lineage Depletion one step magnetic cell separation

Cells are never labeled with antibody Reproducibly high recoveries (70%-85%) of CD34<sup>+</sup>cells

#### In Canada and the U.S. available direct from: StemCell



Technologies Inc 808 - 777 West Broadway Vancouver, BC Canada V5Z 4J7 Tel: (604) 877-0713 Fax: (604) 877-0704 Toll Eree Tel: 1.800.667-0322

#### \*

International Distributors

Australia: AMRAD Pharmacia Biotzch Ltd., Tel: 008-252-265, Fax: 03-9887-3912

Austria: CellSystems, Tel: 02228-8057, Fax: 02228-8555

Czech Republic: LV-BIOMED, Fax 02-2491-1011

France: TEBU, Toi: 1-34 84 62 52, Fax: 1-34 84 93 57

Germany: CellSystems, Tel: 02228-8057, Fax: 02228-8555

Greece: ANTI-SEL, Tel: 021-322 525, Fax: 031-321 912

Italy: FORMEDIC, srl. Tel: 02-58001, Fax: 02-502269
SPA, BioSPA Division, Tel: 02-88103+533/547, Fax: 02-8132983
Japan: Verhas Corp., Tel: 03-3435-1555, Fax: 03-3435-1526

Korea: Bio-Medical & Science Co. Ltd., Tel: 02-568-6902, Fax: 02-553-9670

The Netherlands: ITK Diagnostics ktd., Tel: 02-95-68883, Fax: 02-97-63458

Spain: LABCLINICS, Tel: 03-435-3601, Fax: 03-348-1039
UK: Metachem Diagnostics ktd., Tel: 01-604-870370, Fax: 01-604-870194

ALL PRODUCTS ARE FOR RESEARCH USE ONLY

Circle No. 16 on Readers' Service Card

# PRODUCTS & MATERIALS

#### Microcentrifuge

The KOALA-TY Saturn Micro24 microcentrifuge offers performance and features usually found only on larger, more expensive units. The compact, quiet device is equipped with a separate pulse button, is fully programmable,



and can be used in cold rooms. The unit has a 24- by 2-ml rotor, two speed settings (13,000 rpm/15,682g force and 6500 rpm/3920g force), and a quick-access, safety interlock lid system. Accurate Chemical and Scientific Corp. Circle 135.

#### Sequence Detection System

The ABI PRISM 7700 Sequence Detection System features the quantitative analysis of specific DNA sequences at vastly increased speed. The fully automated system combines a novel chemistry with closed-tube, nongel-based, fluorescence detection to achieve high-throughput quantitation of polymerase chain reaction (PCR) products in real time—that is, as the PCR reaction proceeds. This ability has never been available before. With this system, researchers can analyze up to 500 samples each day—a hundredfold increase in throughput over traditional methods such as Northern (RNA) blots. The fully integrated system includes a built-in thermal cycler, a fluorogenic 5' nuclease assay, laserinduced fluorescence, charge-coupled device detection, and application software. No electrophoresis or post-PCR processing is necessary. **Perkin-Elmer. Circle 136.** 

#### **HPLC System**

The Alliance High-Performance Liquid Chromatography (HPLC) Systems feature the first integrated solvent and sample management technology, the 2690 Separations Module. The chief benefits include minimal system volume for more efficient separations, new solvent delivery technology with a high level of flow precision for more consistent results, and simplified maintenance procedures. The systems offer the analyst the freedom to choose the detector most appropriate for a given analysis. The solvent delivery technology features independent, digitally controlled piston drives for accurate and pulse-free isocratic or gradient solvent delivery. Waters Corp. Circle 137.

#### **DNA from Agarose Kit**

The UltraClean 15 Kit isolates DNA from agarose gels in 15 min. It purifies DNA from polymerase chain reactions (PCRs), labeling reactions, and enyzme reactions in only 10 min. The procedure requires only three steps: bind the DNA; wash away contaminating agarose, PCR primers, label, or enzymes; and elute DNA into water or Tris/EDTA. Mo Bio Laboratories. Circle 138.

#### Mutation Detection System

The CFLP (Cleavease Fragment Length Polymorphism) PowerScan System is designed to detect polymorphisms and mutations in polymerase chain reaction products between 0.1 and 2.0 kb in length. It allows the user 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.

# Introducing a new DNA Ligation Kit that offers more than just "Fast".

Incorporating a unique In-Well Gel Screening procedure, Epicentre's new Fast-Link<sup>™</sup> DNA Ligation & Screening Kit greatly reduces the time necessary to clone DNA fragments and identify recombinants.

- Fast & Easy Ligation. DNAs with either cohesive or blunt ends are ligated in just 5 minutes. PCR products containing 3' A-overhangs are ligated in just 1 hour.
- Fast & Easy Screening. Using Epicentre's exclusive In-Well Gel Screening reagents & protocol, colonies containing recombinant plasmids can be identified quickly without isolating DNA, performing restriction digests, or screening by PCR.
- \* Higher Transformation

Efficiencies. The Fast-Link Kit yields more transformants with a lower background.

Try the new Fast-Link Kit risk-free...Epicentre guarantees outstanding results or your money will be refunded.



Special Introductory Offer (U.S. only) 50% discount on one Fast-Link<sup>™</sup> Kit. Contact Epicentre for details.



Outside of the U.S. contact the distributor in your country, or call 608-258-3080 or fax 608-258-3088. E-mail: techhelp@epicentre.com World Wide Web: http://www.epicentre.com screen larger amplicons (up to 10 times greater) than with conventional methods, which means more sequence scanned per reaction for increased throughput. The system is as sensitive as sequencing, but at a fraction of the cost. Life Technologies. Circle 139.

mRNA from Total RNA Kit

The MPG mRNA Purification Kit is designed for purifying mRNA from total RNA. The kit makes uses of magnetic separation technology, which allows purification of mRNA in a single tube, eliminating the need for oligonucleotide dT columns. All components of the kit are aqueous and nontoxic. The mRNA is immobilized onto MPG Streptavidin-oligo(dT)<sub>25</sub> with yields of up to 4  $\mu$ g of pure intact mRNA per 1 mg of MPG particles. **CPG. Circle 140.** 

#### Spectrophotometer

The BioSpec-1601 spectrophotometer comes standard with applications and super microcells to meet the requirements of the life sciences market. The built-in software includes a full range of functions from nucleic acid purity to protein quantitation, performance validation, and kinetics. Sample absorbance or transmittance can be displayed on the unit's interactive pop-up screen or directed to



the printer. Windows-based software can be added to further expand into Michaelis-Menten kinetics. Shimadzu Scientific Instruments. Circle 141.

#### Perfusion Chromatography Columns

POROS Perfusion Chromatography prepacked columns and bulk media feature patented technology that permits high flow-rate separations without sacrificing resolution or capacity. Protein separations can be performed 10 to 100 times faster than with conventional chromatography media. POROS columns and bulk media are available for these techniques: an-



#### ANNOUNCEMENT

For outstanding achievements in the research of Alzheimer's disease and/or other neurodegenerative disorders, Bristol-Myer's Squibb will sponsor the *Alois Alzheimer Award* (AAA). The research of the future award-winner should have led to new insights into the etiology, pathogenesis, diagnosis and treatment of the disease.

The prize of US \$20,000 will be presented to the winner in December of 1996, again as last year at the Munich University Hospital of Psychiatry, where Alzheimer worked from 1904–1913.

Applications or proposals for nomination should be directed to the Secretary of the Board of the Jury, Hanns Hippius, M.D., Emeritus-Professor for Psychiatry, University Hospital of Psychiatry, Nussbaumstrasse 7, D-80336 Munich, Germany. The deadline for applications/nominations is July 31, 1996.

The Board of the Jury consists of: Professor L. Amaducci, Italy Professor C.G. Gottfried, Sweden Professor H. Lauter, Germany

ci, Italy Professor K. Beyreuther, Germany ied, Sweden Professor F. Henn, USA/Germany Germany Professor R. Levy, United Kingdom Professor H.J. Möller, Germany



ion exchange, cation exchange, hydrophobic interaction, affinity, and reversed-phase chromatography. **Boehringer-Mannheim. Circle 142.** 

#### Literature

Buffers from Amresco describes a line of liquid buffer concentrates and dry buffer blends for electrophoresis and blotting buffer needs. Amresco. Circle 143.

InspectIR FT-IR Microanalysis Accessory is a technical brochure on a device that incorporates the latest advances in infrared sampling technology, optical design, and video imaging into an accessory that can acquire quality spectral data quickly and easily. This powerful combination permits analysis of virtually any sample without preparation, including polymers, pharmaceuticals, coated materials, rubber, contaminants, fibers, paper, and forensic samples. **Spectra-Tech. Circle 144.** 

Taconic 1996 Price List describes an extensive line of Murine Pathogen Free rats and mice and technical services. Taconic. Circle 145.

Cytosensor Microphysiometer: The Only Comprehensive Assay System for Receptor Signaling is a technical brochure with more than 14 experimental data graphs demonstrating the use of this system for a variety of applications: agonist and antagonist profiling, G protein differentiation, signaling specificity, apoptosis, cytotoxicity, signal transduction elucidation, T cell signaling, in vitro toxicity, and microbial susceptibility and challenge assays. The system can detect responses triggered by a wide variety of receptor classes coupled to different second messengers. Molecular Devices. Circle 146.

The Bioprobe Microbial Contamination Monitoring System describes an instrument that provides a sensitive and immediate assessment of the microbiological status of process and rinse waters. Hughes Whitlock. Circle 147.

EX-300 Desktop Elemental Analysis System provides rapid, nondestructive analysis of elements from magnesium through uranium from parts-per-million to 100%. Materials suitable for analysis include solids, liquids, slurries, and powders. Jordan Valley AR. Circle 148.

PCR Product Separation and Analysis is a brochure on products for polymerase chain reaction research. FMC BioProducts. Circle 149.

Handbook of Non-Contact Temperature Sensors contains 130 pages on these infrared devices. Exergen. Circle 150.



The world of SCIENCE On-line: Now you can access these exclusive features on the SCIENCE World Wide Web home page with just a click of your mouse:

• SCIENCE Electronic Marketplace: The latest scientific product information from top companies.

• SCIENCE GLOBAL CAREER NETWORK: On-line classified advertising.

• Beyond the Printed Page: Special interactive projects, important data and more.

• SCIENCE On-line: SCIENCE Table of Contents, the SCIENCE Editorial, This Week in SCIENCE available the same day that the printed version is published!

SCIENCE WWW Address: http://www.aaas.org



# It's easy to do the right thing.

CCC makes it simple, efficient, and cost-effective to comply with U.S. copyright law. Through our collective licensing systems, you have lawful access to more than 1.7 million titles from over 9,000 publishers. Whether it's photocopying, electronic use, or the emerging information technologies of tomorrow-CCC makes it easy. Call 1-800-982-3887 ext. 700 to find out how CCC can help you to Copy Right!<sup>™</sup> ( Copyright Clearance Center® Creating Copyright Solutions 222 Rosewood Drive

222 Rosewood Drive Danvers, MA 01923

Copyright Clearance Center and the CCC logo are registered trademarks of Copyright Clearance Center, Inc. within the United States





Circle No. 22 on Readers' Service Card



Circle No. 42 on Readers' Service Card

Circle No. 24 on Readers' Service Card

# SCIENCE

#### **DISPLAY CLASSIFIED ADVERTISEMENTS**

Call for rate and deadline information on display classified advertisements.

> Bethany Ritchey Recruitment Display Advertising Telephone: (202) 326-6541 FAX: (202) 289-6742

Janis Crowley Recruitment Advertising Manager Telephone: (212) 496-7704 FAX: (202) 289-6742

Debbie Cummings European Recruitment Advertising Telephone: +44 (0) 1223 302067 FAX: +44 (0) 1223 576208

For **ANNOUNCEMENT** display advertisements, turn to page 763.

#### LINE CLASSIFIED ADVERTISEMENTS

How to Submit a Line Classified Ad: Submit 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, Services. SCIENCE cannot provide proofs of typeset line 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.

For line advertising deadlines, call Nancy Hicks. Telephone: (202) 326-6555; FAX: (202) 289-6742.

Credit Cards: SCIENCE accepts American Express, MasterCard and VISA. Discount does not apply to credit cards. Cancellations: Deadline for cancellation is Tuesday,10 days prior to issue date. Discounts: A 3% cash discount is granted to all prepaid ads. Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making

of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Debbie Cummings. Telephone: +44(0) 1223 302067; FAX: +44(0) 1223 576208.

SCIENCE Global Career Network: Unless otherwise instructed, every classified advertisement submitted for publication in SCIENCE is automatically posted on SCIENCE's on-line classified advertising service, SCIENCE Global Career Network, at no additional charge. SCIENCE Global Career Network address: WWW: http://www.aaas.org Gopher: gopher.aaas.org

Mail, FAX or Email materials to: SCIENCE Classified Advertising 1200 New York Avenue, N.W., Room 911 Washington, DC 20005 FAX: 202-289-6742

Internet Email: science\_classifieds@aaas.org (please include your telephone number in Email)

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

#### POSITIONS OPEN

#### CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) Director, National Vaccine Program Office

The **DIRECTOR**, National Vaccine Program Office (NVPO), provides leadership for a national program to develop strategies for achieving optimal prevention of human infectious diseases through immunization; develop strategies for achieving optimal prevention of adverse reactions to vaccines; and ensure coordination and collaboration of vaccine activities within the Federal sector.

Qualifications include outstanding scientific credentials; experience in infectious diseases, immunization, or a related field; knowledge of vaccine policy; and proven ability to proyide scientific leadership for an interdepartmental health program. A doctoral degree (M.D., Ph.D., Sc.D. or other) in biomedicine or a related field is desirable. Depending on qualifications, the annual salary range is up to \$148,400. Public Health Service Commissioned Corps Officers are also eligible to apply. Interested applicants may send their curriculum vitae postmarked by June 28, 1996, to: Nancy Peterson, Human Resources Management Office, Mailstop Ruford Highway, Atlanta, GA 30341-3724. Telephone: 770-488-1785. This is a critical-sensitive position requiring an investigation and drug test for a security clearance. *CDC is an Equal Opportunity Employer and provides a smoke-free work euvironment*.

#### DIRECTOR, CONSERVATION SYSTEMS DEPARTMENT

The Nature Conservancy (TNC) seeks qualified applicants for the position of **DIRECTOR**, Conservation Systems Department. This is a senior position responsible for providing leadership and strategic guidance for the development of the next generation of TNC's biodiversity information management systems. The Director will assess the scientific information needs of TNC and collaborators, particularly the Natural Heritage Network; develop and implement scalable next-generation biodiversity information systems; and raise funds as needed. The Director manages and provides technical leadership to teams involved in technology R&D, information engineering, software design, biodiversity information management, spatial information systems, internet-working, and systems-level integration.

Requirements include significant experience in natural resources information management, with at least five years as a senior information systems manager; and experience developing systems and disseminating standards, methods, and technologies for use by a distributed collection of programs and collaborators. Review of applications will begin immediately. Submit application and résumé to: Carol Hodge, The Nature Conservancy, 1815 North Lynn Street, Arlington, VA 22209. Internet: dbjensen@ tnc.org. Equal Opportunity Employer.

#### CHEMISTRY

The Division of Natural Sciences at Ohio Dominican College (ODC) invites applications for a **TENURE-TRACK** position available September 1996. Ohio Dominican College is a four-year liberal arts college of 1,800 students. The appointee will have a Ph.D. in analytical chemistry and will be able to teach the following courses: analytical chemistry, instrumental analysis, introductory chemistry, general chemistry, and a non-majors physical sciences survey course. Applicants should provide a current résumé, curriculum vitae, names of three references, and statement of previous teaching experience by June 7, 1996, to: Division of Natural Sciences Chairperson, Ohio Dominican College, 1216 Sunbury Road, Columbus, OH 43219. ODC is an Equal Opportunity Employer.

#### LEADERSHIP OPPORTUNITY ENVIRONMENTAL EDUCATION

Marietta College invites applications for a tenure-track position as **DIRECTOR** of one of our flagship programs, a newly created, interdisciplinary Environmental Science program. An advanced degree in environmental science, environmental engineering, or related discipline is required. Industry and teaching experience are preferred. Principle responsibilities include program administration, grant writing, developing industry contacts, and teaching. Our Environmental Science major enjoys strong faculty and administrative support, as do planned additional tracks in environmental studies and environmental engineering.

Send curriculum vitae and reference list to: **Mr. David Freeman, Search Chair, Marietta College, Marietta, OH 45750.** Application review will begin immediately. *Candidates must be qualified to work permanently in the United States.* 

#### POSITIONS OPEN

#### ASSISTANT PROFESSOR

The Applied Animal Biotechnology Laboratory, Department of Poultry Science, Louisiana State University (LSU), Baton Rouge, Louisiana, is accepting applications for an **ASSISTANT PROFESSORSHIP**. Applicants must have a Ph.D. in molecular biology/microbiology or closely related discipline. Required experience includes cloning, site directed mutagenesis, fusion protein expression systems, DNA sequencing, and gene mapping; protein chemistry experience is desired but not essential for acceptance. The successful applicant will join an active multidisciplinary research team currently engaged in the examination of endocrine mechanisms that stimulate ovulation in avian species. The candidate will also assist in the continued development of biotechnology applications to the poultry industry. Salary commensurate with training and experience. Benefits include University holidays, earned annual and sick leave, and optional group hospitalization with a minimum appointment of two years. The laboratory has received significant funding from a strong corporate sponsor as well as state funding for the past several years. Application deadline is June 17, 1996 with the position open July 1, 1996. Applicant should send a letter containing names of three references, a brief statement of research interests, and a complete curriculum vitae to:

#### Dr. Roger A. Teekel, Chairman Department of Poultry Science LSU Agricultural Center Baton Rouge, LA 70803-4606 Telephone: 504-388-4481

Louisiana State University and the Louisiana Agricultural Experiment Station are Equal Opportunity/Affirmative Action Employers.

The Department of Chemistry and Biochemistry of the University of California, Los Angeles, is seeking to fill the **COURTAULDS CHAIR** in polymer chemistry. The occupant of this chair will hold a state-funded regular faculty position; the income from the endowment is available to the holder as an unrestricted fund for purposes of research and teaching. Candidates who give evidence of unusual distinction in scholarship and teaching, a truly exceptional record of research accomplishment, and demonstrated ability to obtain research funding in a competitive environment are sought. Applications should be completed by July 1, 1996, and directed to: Chair, Courtaulds Chair Search Committee, Department of Chemistry and Biochemistry, P.O. Box 951569, University of California, Los Angeles, CA 90095-1569. The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.

#### FOREST ECOLOGIST

The Department of Forestry at Michigan State Univer-sity is seeking applicants for a full-time (12-month), ten-ure-track **ASSISTANT PROFESSOR** of forest ecology position (research 75%, extension 20%, and teaching 5% appointment). The successful applicant is expected to 1) build a nationally recognized scholarly research program in forest ecology with a focus on landscape, ecosystem, and community-level problems critical to forest management in Michigan; 2) develop collaborative projects, research applications, and extension programs with the For-est Management Division of the Michigan Department of Natural Resources; and 3) teach one course (every other Natural Resources; and 3) teach one course (every other year) in forest ecology at the graduate level, participate in the interdepartmental Ecology and Evolutionary Biology Program, and be actively involved in M.S. and Ph.D. graduate education. Candidates must have a Ph.D. in forest or plant ecology, with at least one degree in forest-ry. If Ph.D. is in plant ecology, strong emphasis in man-aged forest ecosystems is required. A commitment to excellence, knowledge of current research methods in forest cology. methods in ecological reforest ecology, professional experience in ecological re-search and education, and demonstrated ability to communicate effectively and work collaboratively are primary search criteria. Applications will be accepted until July 1, 1996 or until position is filled. Candidates should submit a letter outlining research, extension, and teaching intervitae; transcripts; and four letters of reference to: Dr. Karen Potter-Witter, Chair Ecology Search Committee, Department of Forestry, Michigan State Univer-sity, East Lansing, MI 48824-1222. Telephone: 517-355-0094; FAX: 517-432-1143; Email: KAREN@ msu.edu. Michigan State University is committed to building a diverse faculty

# Bristol-Myers Squibb Pharmaceutical Research Institute **Postdoctoral Fellowship Program in Pharmaceutical Development**

Pristol-Myers Squibb Pharmaceutical Research Institute is proud to announce a new Postdoctoral Fellowship Program in Pharmaceutical Development designed to provide Postdoctoral candidates with a stimulating learning environment through an intellectual exchange with accomplished scientists. Bristol-Myers Squibb has a long established and successful history of postdoctoral programs, and our continued commitment will provide participants with the opportunity to:

- **Collaborate** in a research project relevant to pharmaceutical development with an assigned mentor drawn from an appropriate scientific area of specialization.
- Design and conduct complex scientific experiments requiring highly specialized knowledge.
- Develop projects through interdepartmental working groups and in collaboration with outside institutions.
- Publish significant research findings in appropriate scientific journals.

Opportunities exist in two of our locations. All positions are for one year with renewal possible for an additional year. We offer excellent salary, medical and relocation benefits.

#### SYRACUSE, NY

### Genetic Toxicology

We are seeking a cytogeneticist/genetic toxicologist with some experience and the ability to microscopically evaluate mammalian cell chromosome damage (aberrations and micronuclei). You will work on a project in chromosome aberration analysis using FISH (fluorescence in situ hybridization) techniques. The individual will also be involved in GLP cytogenetic evaluations (in vivo and in vitro) of company project compounds and work on transgenic animal gene mutation assays.

For Syracuse position, please foward/fax your resume with salary requirements to: Manager of Human Resources, Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. SY-GT, P.O. Box 4755, Syracuse, New York 13221. FAX: 315-432-2640.

# Bristol-Myers Squibb Company



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

#### **NEW BRUNSWICK, NJ**

#### Ph.D. Biochemistry/Biochemical Engineering Microbial Technology

Become a member of the Enzyme Technology Group. Conduct enzymatic process research work to improve the technical feasibility of new product development by novel enzyme immobilization techniques. Investigate the reusability of immobilized enzymes in benchtop reactor. Collaborate in research projects with protein and enzyme isolating personnel. Background in the application of biocatalysts (immobilized enzyme) in the synthesis of chiral compounds and knowledge in organic chemistry are helpful. **Dept. MS-LZ** 

### Ph.D. Chemistry Bioanalytical Research

Candidates should have a strong background in HPLC/atmospheric pressure ionization mass spectrometry and analytical method development. Experience in bioanalytical method development would be an asset. Specific areas of involvement will include:

- Design/conduct experiments to elucidate the effect on sensitivity of the many parameters associated with the various stages of HPLC/positive or negative mass spectrometry
- Using model compounds of varying chemical structures, design/conduct experiments to compare the sensitivity obtained with the two modes of atmospheric pressure ionization mass spectrometry (electrospray and APCI) with the goal of establishing practical guidelines for the a priori choosing between the two techniques for the analysis of a compound of a given chemical structure
- Investigate the potential for LC/MS or LC/MS/MS for quantitative bioanalysis of macro biomolecules

#### Dept. MS-MJ

#### Ph.D. Chemical Engineering Chemical Process Engineering

Become part of a program to enhance the capability of our crystallization laboratory. The objective of this program is to provide a sound engineering basis for the reproducible, practical and economic production of Bulk Drug Substance powders of physical characteristics and chemical purity which allow Bulk Drug Products to be developed and produced in a similarly efficient manner. The ultimate goal is for us to design and produce "engineered particles" with physical characteristics "on order" for expedited pharmaceutics development. **Dept. MS-LS** 

For New Brunswick positions, please foward/fax your resume with Dept. # to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, P.O. Box 11279, Trenton, NJ 08620-0279. FAX: 609-581-8841.

# Make a global impact in clinical drug development

QUINTILES PACIFIC, INC., located in San Diego, California, is a growing contract research organization working with the pharmaceutical industry in developing new psychotropic and other (CNS) drugs.

We have an on-going need for outstanding individuals with experience as:

#### 

QPAC offers a comprehensive benefits package, a company conducive to professional and personal growth, and the opportunity to be a part in sharing a common goal of excellence in the clinical drug trial industry with a leading CRO. Please send resume with salary requirements to: **QPAC**, **Attn: HR/S**, **10201 Wateridge Circle**, **San Diego**, **CA 92121**. EOE.

# **O**QUINTILES

Incyte Pharmaceuticals is a leader in the design, development and marketing of genomic database products and services. Our LIFESEQ database integrates bioinformatics software with genetic information to create an information-based tool used by pharmaceutical companies in drug discovery and development.

#### **SCIENTIST**

Ph.D. Genetics or Molecular Biology and at least 2 years of postgraduate experience are required to develop new sequencing chemistries, integrate them into production operations and evaluate new sequencing technologies. Experience with automated sequencing, robotics, and enzymology of sequencing strongly preferred. REF. 034.

#### **RESEARCH ASSISTANT**

This highly organized and motivated individual will work on developing new sequencing and template preparation strategies. Applicants should have BA/BS in Biology or relevant discipline and at least 1 year of industry experience in DNA sequencing, in addition to excellent analytical and organizational skills. You must also have a working knowledge of ABI 377 machinery. REF. 035.

Incyte offers a premier R&D facility in the foothills of Palo Alto, along with competitive salaries, an outstanding benefits package, and significant opportunities for professional growth. Please mail/fax your resume to Incyte Pharmaceuticals, Inc., Attn: KRH/ REF. \_\_\_\_, 3174 Porter Dr., Palo Alto, CA 94304, FAX 415/855-0572. EOE.

œ

ΙΝϹΥΤΕ

PHARMACEUTICALS INC

#### USC/Norris Comprehensive Cancer Center, Associate Director for Basic

The USC/Norris Comprehensive Cancer Center is seeking to recruit a senior basic scientist with an international reputation in cancer research to provide scientific leadership to the biochemists, molecular and cell biologists and immunologists who form the basis of pre-clinical and translational worl of the Cancer Center. This individual will have direct responsibility for the Gene Regu lation and Cell Biology Programs and will have overlapping responsibility for ensur-ing the integration of these disciplines into the newly established disease-based programs within the Center. The Associate Director will have an active peer-reviewed funded research program and will share responsibility for recruitment with appro-priate program leaders. The Associate Director will have a tenured position in an appropriate academic department of the chool of Medicine and will foster existing training programs, develop new training programs, develop funding for new equip-ment, be responsible for the Mini-symposia Series and Seminar Program and oversee the operation of Cancer Center core resources of particular relevance to basic science members. The position will be supported by the recently renewed Cancer Cen-ter Support Grant and by a newly estab-lished Endowed Chair. Space for the Asso-ciate Director's research program, together with space for new cancer center recruitments in the basic sciences will be available in the recently completed Topping tower which has doubled the Center's research space. Send C.V. together with the names of Space. Send C. V. together with the hands of 3 references to Peter A. Jones, Ph.D., Di-rector, USC/Norris Comprehensive Can-cer Center, 1441 Eastlake Avenue, MS#83, Los Angeles, CA 90033. USC is an Affirma-tive Action/Equal Opportunity Employer.

Research

#### **Director of Cytogenetics**

The Department of Pathology and Laboratory Medicine at the UCLA School of Medicine is seeking a director of its large and active cytogenetics laboratory within the Clinical Laboratories of the UCLA Medical Center. This laboratory handles 3,000 cases per year including a wide variety of prenatal, clinical genetics, and cancer cytogenetics cases. Medical genetics, molecular genetics, obstetrics, oncology and genetic counseling support are closely available and actively involved in all cases. The laboratory is heavily involved in the integration of new technology such as fluorescence in situ hybridization (FISH), and there are ample opportunities for collaborative research efforts. A major focus is the advancement of new cytogenetic technologies, and it is expected that the director continue to develop a laboratory of national stat-

Qualified applicants must possess a doctoral degree with at least two years of postdoctoral experience and be board-certified in cytogenetics. M.D. applicants must have or be able to obtain a California medical license. Broad experience in all aspects of clinical cytogenetics, including FISH technology, is essential, and evidence of scholarly productivity is preferred. The rank and series of academic appointment will be commensurate with prior experience, accomplishments, and career goals.

Interested applicants should send a letter of intent, curriculum vitae, and names, addresses and telephone numbers of three references to: Wayne W. Grody, M.D., Ph.D., Chair, Cytogenetics Search Committee, Divisions of Medical Genetics and Molecular Pathology, UCLA School of Medicine, Los Angeles, CA 90095-1732. UCLA is an equal opportunity employer.

#### Recultment Adventisers

**SAVE 25%** 

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

For advertising information: In Europe, phone +44 (0) 1223 302067, or fax +44 (0) 1223 576208 In the U.S., phone (202) 326-6532, or fax (202) 289-6742. In Japan, phone +81 3 3235-5861, or fax +81 3 3235-5852 In Australia, phone +61 02 922 2977, or fax +61 02 922 1100



# S C I E N T I S T S Challenging infectious and cardiovascular diseases, allergies, cancer and central nervous system disorders...

#### That's Schering-Plough

From molecules to medicines. At Schering-Plough, scientists are discovering and developing the novel therapeutics that challenge mankind's most debilitating diseases. To continue this important work, we seek talented scientists with knowledge and dedication.

### ALLERGY RESEARCH

Our expanding Allergy Research Group seeks three Scientists to contribute to ongoing pulmonary inflammation research projects by developing *in vivo* models of asthma, including measurement of lung function.

#### SENIOR SCIENTIST

We seek an independent self-starter to play an important role on a professional research team. To qualify, you will need a PhD in Pulmonary Physiology or a related field and 1-3 years of postdoctoral training. Background, training and experience should include measurement of pulmonary function *in vivo*. To be considered for this position, please respond to: Human Resources-BG, Dept. DD96-28.

#### SCIENTIST & ASSISTANT SCIENTIST

We seek talented scientists to assume major responsibilities for ongoing pulmonary studies. Both positions require proven experience with *in vivo* models of lung function and strong knowledge of pulmonary mechanics.

To qualify for our Scientist position, you will need a BS in Animal Science or related field and 7-10 years of experience, or an MS and 5-8 years of experience. To be considered for this position, please respond to: Human Resources-BG, Dept. DD96-27.

To qualify for our Assistant Scientist position, you will need a BS in Animal Science or related field and 2-4 years of experience, or an MS and 1-2 years of experience. To be considered for this position, please respond to: Human Resources-BG, Dept. DD96-29.

### DRUG METABOLISM SENIOR SCIENTIST

Our Exploratory Drug Metabolism Group, which is responsible for all drug metabolism activities related to drug discovery, has a career opportunity for a Senior Scientist to be involved in the development of bioanalytical methods for the analysis of drug candidates in biological matrices. You will also design and conduct *iin vivo* and *in vivo* studies to answer specific questions regarding absorption, distribution, metabolism, elimination and pharmacokinetics of drug candidates.



To qualify, you must have a strong background and handson experience in various techniques to evaluate oral absorption such as CaCo2 cells, inverted guts, intestinal perfusion, Ussing chambers and others. In addition, you will need a PhD in Chemistry, Biochemistry, Pharmacology, Toxicology or related discipline and at least 3 years of postdoctoral experience in drug metabolism and pharmacokinetics research. Excellent written and oral communication skills are essential. To be considered for this position, please respond to: Human Resources-KB, Dept. DS95-08.

### STRUCTURAL CHEMISTRY ENZYMOLOGIST

Recognizing the importance of mechanism-based approaches to target selection for the discovery of effective therapeutic agents, we are seeking a committed scientific leader to conduct independent research on established enzyme targets. The Enzymologist qualified for this exciting opportunity will provide scientific leadership and assist in the identification and characterization of new therapeutically important proteins. The successful candidate will be an integral member of our Structural Chemistry Department which is focused on integration of structurebased methods into drug discovery. Groups with this department are currently dedicated to protein purification, ligand and inhibitor binding studies, computer modeling of proteins and small molecules, and macromolecular x-ray crystallography.

To qualify, you will need a PhD in Chemistry, Biochemistry or related field and at least 6 years of experience in enzymology which must include working knowledge of modern molecular biology and biochemistry techniques. To be considered for this position, please respond to: Human Resources-BP, Dept. DD95-39.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Human Resources/Dept. Code for your position of interest and salary requirements to: Schering-Plough Research Institute, K-15-1, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.

Advan

# Looking for Talent in Bioinformatics?

JUST ADDED! Special Product Advertising Supplement focusing on Computers in Science -- 7 June 1996.

### NEW! Bioinformatics Banner Highlights Your Organization's Career Opportunities!

In this issue, SCIENCE will highlight recruitment advertisements targeted to scientists with computer expertise under a new **Bioinformatics banner**. This is the perfect place to promote your career opportunities.

### Get extra exposure with SCIENCE Classified Advertising On-line...Now completely upgraded!

The best on-line classified advertising service for scientific careers just got better:

• **New easy-to-use format:** An updated design by the Stanford University's High Wire Press makes finding your organization's career opportunities a snap for scientists.

• **New Search Engine:** Now both display and line ads will be posted in a fully searchable text format that allows scientists to narrow their recruitment search by discipline and geographic area.

• **New Internet Staff:** The new SCIENCE Internet staff assures that your electronic recruitment ads receive the same top service and care as your print advertising.

• New System Enhancements: Look for additional upgrades and features in 1996!

### For more information contact:

**US**: **Janis Crowley** Phone: (212) 496-770 Fax: (202) 289-6742 *Europe*: **Debbie Cummings** Phone: +44 (0) 1223 302067 Fax: +44 (0) 1223 576208

# Space Reservation Deadline: 21 May 1996



NOTE: This is a special product advertising supplement. Recruitment advertisements will appear in the traditional classified advertising section in the back of the book.



# POSTDOCTORAL OPPORTUNITIES

Hoffmann-La Roche's dedication to the future is evident in our commitment to the research, development and manufacture of pharmaceuticals worldwide. We currently have the following opportunities available for dedicated, experienced scientific professionals to join us in our U.S. headquarters in Nutley, New Jersey.

MOLECULAR BIOLOGY -- A postdoctoral position is available for an individual interested in signal transduction and cytokine-receptor interactions. Studies will focus on structure-function analysis and biochemical modifications of the IL-1 receptor accessory protein (IL-1R AcP). The applicant should have a recent Ph.D. (0-2 years) in Molecular Biology, Biochemistry, Immunology, or a related field. Experience in basic molecular biology is required. Knowledge of cytokine biology and familiarity with protein biochemistry and immunological techniques are desirable. *(Respond to: Dept. SS386GJ)* 

BIOCHEMISTRY -- The selected candidate will utilize molecular/cellular/biochemical techniques to examine integrin VLA-4 activation mechanisms in regulating leukocyte migration. The applicant should have a recent Ph.D. (0-2 years) in Biochemistry, Molecular Biology, or Cell Biology with extensive experience in biochemical and immunological characterization of cellular proteins. Additional experience in molecular cloning, protein expression, site-directed mutagenesis, and signal transduction studies is also desirable. (*Respond to: Dept. SS396KH*)

MOLECULAR BIOLOGY -- A postdoctoral position is available for an individual interested in analyzing the signal transduction mechanisms that occur through the IL-12 receptor. Studies will focus on i) a structure-function analysis of the cytoplasmic regions of the two cloned IL-12 receptor subunits, and ii) the ability of the receptors to transduce a signal leading to induction of interferon-gamma secretion. The applicant should have a Ph.D. in Molecular Biology, (molecular) Immunology, Cell Biology or a related field. Basic laboratory experience in general molecular biology and biochemistry as well as a basic knowledge of cytokine/cytokine receptor biology are required. (*Respond to: Dept. SS406UG*)

We offer an attractive salary and benefits package and the opportunity to work in a multidisciplinary environment that stimulates personal and professional growth and encourages publication. For consideration, please send your resume, indicating appropriate response code information in the address, to: **Ms. Stella Strazdas, Department** \_\_\_\_\_, **Hoffmann-La Roche, Nutley, New Jersey 07110-1199. We** are an equal opportunity employer.



A Member of the Roche Group

# Genetic Analysis Scientist

LI-COR, a growing company that has produced automated systems for biological and environmental sciences for 25 years, has an opening for an Applications Scientist in the Molecular Biology Group.

The Applications Scientist will develop new products and applications for genotyping, write technical publications, and participate in the technical sales and support process. This individual will play a key role in setting directions for product development in genetic analysis.

The successful candidate will have a Ph.D. in molecular genetics or a related discipline with at least 2-3 years experience in mapping of disease genes and genotyping of a variety of loci through the use of STR, RFLP, VNTR, and related genotyping methods. Familiarity with basic molecular biology techniques, including DNA sequencing, PCR, hybridization, non-isotopic detection and a working knowledge of genotyping and DNA analysis software is also required. Post-doctoral experience and/or industrial experience is desirable.

LI-COR offers competitive salaries and benefits. For consideration, submit your C.V. or resume to the Human Resources Dept., LI-COR, Inc., 4421 Superior Street, Lincoln, NE 68504. EOE.



# Systems Analyst/Programmer

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 seek an experienced Systems Analyst/Programmer to support our screening and combinatorial efforts at our Boulder, CO research facility. Responsibilities include the design, development and maintenance of relational databases and/or laboratory information management systems. You will work with research scientists to determine their needs and develop suitable data management tools.

Successful candidates must have a degree in Computer Science, Chemistry, Biology, or equivalent; 3 years' experience building relational databases; and 4 years' general programming experience. Client server software development using tools such as Powerbuilder, Visual Basic, Fourth Dimension, Microsoft Access and Oracle tool kits; knowledge of Excel, Lotus 123, C, C ++, and Pascal; experience with data modeling and development methodology for relational DBMS systems such as Oracle and Sybase; and experience in a rapid prototyping development environment also required. Involvement with data management in a high throughput screening or combinatorial chemistry environment within the biopharmaceutical industry is highly preferred. Excellent communication skills and the ability to work in a multi-discipline team environment are essential.

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 that includes a retirement and savings plan. Please e-mail your resume/c.v. to: jobs@amgen.com and indicate resume as your subject or mail your resume to: Amgen, Human Resources Dept., Job Code: BPSCA3070, 3200 Walnut Street, Boulder, CO 80301. Please consult our on-line Job Bulletin Board at http://www.bio.com for information on other career opportunities available at Amgen. Principals only, please. EEO/AA Employer M/F/D/V

Trademarks are registered to their respective companies.



QIAGEN, the world wide leader in nucleic acid purification, is seeking highly motivated and talented individuals to join our rapidly growing team. QIAGEN is committed to providing high quality, innovative purification products to the molecular biology and molecular diagnostic research communities.



Product Manager. Responsibilities include marketing conceptualizing, coordinating product launches, contacting customers, and supporting the sales team on PCR/QIAquick products. 30% travel is typical. Prior marketing/sales experience and outstanding communication skills are required. MS/BS degree and 2 years of lab experience in molecular biology or related fields. (Reference PM-0496)

Associate Product Manager — Genomic Sequencing. Expand your scientific horizons in a team dedicated to providing tools for the 21st century in the area of high-throughput DNA sequencing/genome analysis. Applicants should have an MS or PhD degree in a molecular biology-related area and a minimum of two years experience in high-throughput DNA sequencing. Sales and marketing experience is a plus. (REF.APM/GS-0496)

Associate Product Manager — Molecular Biology. Take advantage of expanding opportunities in the molecular research markets! Applicants should have an MS/BS degree in a molecular biology-related field, significant molecular biology-related laboratory research and/ or two years of sales or marketing experience that includes DNA purification products. (REF.APM/MB-0496)

For both APM positions, responsibilities include marketing conceptualization, coordinating product launches, contacting customers, and supporting the sales team. 30% travel is typical. Outstanding communication skills are required.

**Technical Support Specialist.** Responsibilities include providing technical support for QIAGEN's complete product lines. Additional duties include providing technical training for internal and external customers, and writing and editing technical literature. Must have PhD/MS/BS degree and at least 2 years of lab experience in Molecular Biology or related discipline and outstanding communication skills. Experience in recombinant protein expression and purification is desirable. (REF.TSS-0496)

QIAGEN is a rapidly growing, highly successful company located in the western San Fernando Valley. The corporate atmosphere is friendly and informal, and provides a team working environment. QIAGEN offers competitive salaries, a comprehensive benefit package including a 401(k) plan, and is committed to aiding employee personal and professional development with sponsored continued education. If you think you have what it takes to contribute to QIAGEN's continued success, take this opportunity to become part of the QIAGEN team.

Send resumes to Human Resources/(Ref. No.), QIAGEN INC., 9600 Desoto Ave., Chatsworth, CA 91311, FAX 800-718-2056

Massachusetts A M H E R S T DARWIN FELLOW

UMASS Amherst announces a postdoctoral lectureship in organismic and evolutionary biology. More than 60 faculty members in 10 departments are committed to the study of organismic and evolutionary biology, offering unique training and research opportunities for recent Ph.D.'s. Our 2-year lecture/research position allows independent research with a faculty member and experience developing and teaching a 1-semester undergraduate course. Position subject to availability of funds. 1st year salary: \$20,000. 2nd year salary: \$25,000. To apply, send: CV; 3 letters of reference; statements of research and teaching interests; and letter of support from your proposed UMASS Amherst faculty sponsor. Email darwin@bio.umass.edu or call 413-545-0928 for a list of faculty research interests and more information. Send materials to:

Darwin Fellow Morrill Science Center University of Massachusetts Amherst Amherst, MA 01003-5810

Application review begins: 6/15/96 Position remains open until successful candidate is selected. Earliest start date: 9/1/96

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

# RESEARCH ENTOMOLOGIST

DowElanco has an immediate opening in our Discovery Research Insect Management Group for a research entomologist interested in the discovery and development of innovative approaches to insect pest control. The position is located at our Global Research Laboratories in Indianapolis, IN, USA. As a member of an interdisciplinary team, this scientist will lead the biological efforts for the discovery of novel methods of controlling sap feeding insects and nematodes. We require an adaptable, innovative, energetic person who can function productively as a member of our multi-disciplinary research group.

A Ph.D. in entomology, biology, zoology or nematology is required, with experience in the biology and physiology of sap feeding insects and/or nematodes. Additional experience in plant physiology, chemical mobility and transport in plants, toxicology, organic chemistry and biochemistry is preferred.

In addition to a competitive compensation and benefits package, DowElanco offers challenging opportunities within a creative, stimulating, and diverse work environment. DowElanco is an affirmative action, equal employment opportunity employer.

Interested candidates should send a letter of interest, resume, transcripts, and provide three letters of reference, by July 1, 1996, to:

> Kathy McIntyre/IMG-Science1 R&D Human Resources DowElanco 9330 Zionsville Road Indianapolis, IN 46268 Phone: 317-337-4956 FAX: 317-337-4970

> > **DowElanco**



#### Chairman, Department of Biochemistry and Molecular Biology Medical College of Ohio

The Medical College of Ohio invites applications for the position of professor and chairman of the Department of Biochemistry and Molecular Biology. Candidates must have a Ph.D. or M.D. degree (or their equivalents) and have an outstanding record of scientific accomplishments, research funding, graduate and medical education, and evidence for administrative and leadership ability. The successful candidate will lead a strong department of eleven fulltime faculty with strengths in molecular biology, enzymology, peptide chemistry and regulation of cell growth.

The Medical College of Ohio is a free-standing, state-supported institution with outstanding modern educational, research and clinical facilities. We seek an energetic and highly interactive chairperson who will promote the future growth of the department to implement the missions of the School of Medicine and the College. To apply, send a curriculum vitae and the names of three references to:

> John P. Rapp, D.V.M., Ph.D. Chairman, Biochemistry Search Committee Professor and Chairman Department of Physiology & Molecular Medicine Medical College of Ohio P.O. Box 10008 Toledo, Ohio 43699-0008

Home Page Address is: http://www.mco.edu The Medical College of Ohio is an Affirmative Action/Equal Opportunity Employer



Showcase Your Scientific Career Opportunities On-line for Two Months

# **Regulatory Affairs Forum**

Beginning on May17, the topic of Scientists as Regulatory Affairs Specialists will be discussed in a twomonth interactive career forum on SCIENCE's Next Wave, a new on-line publication. During that time, your organization's logo will appear on the first page of this forum and will be linked to a listing of your scientific career opportunities or your organization's homepage. Because this is on-line, you will have the flexibility to change the career opportunities posted throughout the two-month period. Only SCIENCE brings you this opportunity to make information about careers at your organization accessible to the thousands of scientists who visit SCIENCE's World Wide Web site every day.



For more information contact Janis Crowley • Phone: (202) 326-6532 • Fax: (202) 682-0816

**Special Advertising Supplement** 

# Career Opportunities for Scientists with Disabilities

### 14 June 1996

On 14 June, SCIENCE will publish a special advertising section devoted to career opportunities for scientists with disabilities. This section will examine the steps being taken by employers to make their work environments accessible to all scientists.

What are companies and institutions doing to create barrier-free buildings and work stations?
How do organizations utilize the thousands of devices designed to accommodate people with special needs?

By advertising in this special section, your organization can send a recruitment message and show support for hiring scientists with disabilities.

#### **Bonus Distribution**

This issue will be distributed to the AAAS Resource Group of Scientists and Engineers with Disabilities.

#### Benefits to Full Page Advertisers: • Special Positioning

Full page recruitment advertisements will receive placement throughout the career-related special advertising section.

#### Advertiser Indexes

An index of full page recruitment advertisements referring readers to your ad in the special section will be published in this issue. Names of full page recruitment advertisers will also be listed on an index affixed to the covers of magazines mailed to the AAAS Resource Group of Scientists and Engineers with Disabilities.

#### • The Internet

The advertising supplement will also be published on SCIENCE Classified Advertising Online. An on-line advertiser index will link directly to your full page ad, and we will link your on-line ad to a listing of your career opportunities or your home page for no additional charge.

All recruitment advertisements are posted on SCIENCE Classified Advertising On-line. http://www.aaas.org

To advertise contact Janis Crowley Phone: (212) 496-7704; FAX: (202) 682-0816.

Advertising space reservation deadline: 21 May



# Genes and Cancer Albert Einstein Cancer Center

The Albert Einstein Cancer Center, one of the first NCI-funded matrix centers in the US, along with the School of Medicine, has initiated a major expansion with new facilities and resources focused on basic and translational research programs. We are seeking six faculty at the Assistant to Full Professor level who have an outstanding record of research accomplishment. Preferred areas include: regulation of cell proliferation, differentiation or cell death; genetic basis of metastasis; mouse models for human cancer; human cancer genes. Faculty will be appointed to a relevant basic science department and will join well-established intra-disciplinary programs in immunology, virology, developmental biology, molecular genetics, membrane biology and drug development. A strong clinical oncology program offers the opportunity to extrapolate basic research findings into the clinic. Physician-scientists are especially encouraged to apply.

The Albert Einstein College of Medicine is located in a suburban neighborhood in New York City minutes from Westchester county, and it provides a highly interactive research environment. Strong supporting core facilities include among others, transgenic and gene targeting facilities, structural biology, cytogenetics, DNA and protein chemistry and digital image capabilities. Competitive salaries and start up packages are provided. Please send curriculum vitae and three letters of reference to: Dr. Jeffrey Pollard, Chair, Recruitment Committee, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, Cancer Center, Belfer 1002, 1300 Morris Park Avenue, New York, NY 10461. Equal Opportunity Employer.



#### **ANNOUNCEMENT**



#### American Society of Tropical Medicine and Hygiene

#### **Annual Meeting Call for Abstracts**

The American Society of Tropical Medicine and Hygiene (ASTMH) will hold its 45th Annual Scientific Meeting **December 1-5, 1996**, at the Hyatt Regency in Baltimore, Maryland.

Abstracts are to be submitted on a disk provided by the Society. The deadline for receipt of abstracts is June 3, 1996.

To request your disk, contact:

American Society of Tropical Medicine and Hygiene 60 Revere Drive, Suite 500 Northbrook, IL 60062 USA Phone: 847/480-9592 Fax: 847/480-9282

ASTMH is the sole organization in the United States representing scientists engaged in research on tropical diseases. The ASTMH annual meeting includes basic research on disease agents and mechanisms of pathogenesis at the molecular level; new methodologies for diagnosis; vaccine and drug design and evaluation; epidemiologic investigations; public health vector biology and control. Some items of special interest at the 1996 meeting include:

- Nucleic Acid Vaccines for Human Viral Pathogens J. Patterson
- Measles: The Neglected Tropical Killer C. Karp
- Vitamin A Status: Morbidity and Mortality A. Sommer
- Use of Parasites to Dissect Components of the Host Immune Response --- R. Locksley
- Molecular Biology and Biochemistry of Parasites: Impact on Disease — S. Hajduk
- Vaccine Development, from the Lab Bench to Clinical Trials M. Levine
- Viral Evolution J. Patterson
- Cryptosporidium and Cryptosporidiosis T. Graczyk and R. Fayer
- Sustaining Malaria Control --- C. Shiff

#### **Marine Microbiology**

Applications are invited for a scientific position at MBARI, at Assistant, Associate, or Senior level, in the research area of microbiology. MBARI offers unique opportunities for advanced, technology-based scientific research, and we encourage cooperative projects between scientists and engineers. The successful candidate will be expected to develop independent research programs, consistent with these themes. Further, he/she will be expected to interact with ongoing MBARI programs in primary productivity, midwater ecology, and/or benthic biology.

Founded in 1987 by the late David Packard, MBARI is a nonprofit, private oceanographic research institute, uniquely dedicated to the development of state-of-the-art equipment, instrumentation, systems and methods for scientific research in the deep waters of the ocean. Located in Moss Landing, California, MBARI's newly established research center includes science and engineering laboratories, as well as an operations facility to support our two research vessels. The Institute deploys a remotely operated vehicle (ROV) to depths of 1500m in Monterey Bay for the purpose of scientific investigation, and is currently developing a new advanced ROV with an operating depth of 4000m.

MBARI enjoys cooperative relations with neighboring academic institutions, including Stanford University, the University of California at Santa Cruz, the Naval Postgraduate School, and Moss Landing Marine Laboratories, with opportunities for collaborative research. Our special relationship to the Monterey Bay Aquarium also provides a unique opportunity for public outreach in the ocean sciences.

Applications should include an updated curriculum vitae, a statement of research interests, and the names and addresses of four professional references. Applications should be submitted prior to June 24, 1996 to be considered. The preferred starting date is before December 31, 1996. MBARI offers a competitive compensation and benefits package, including retirement. Please respond to MBARI, Human Resources, Dept. MB, PO Box 628, Moss Landing, CA 95039-0628. EOE. MBARI welcomes Diversity.

#### Pharm.D., Ph.D., or M.D.



ASTRA MERCK

At Astra Merck Inc. we've put our hearts and minds behind a new kind of company. We are a customer-focused, technologicallyenabled business organization that markets pharmaceutical products and services to identified managed-care systems, hospital buying groups and other defined market segments.

### **MEDICAL INFORMATION SCIENTIST** Cardiovascular

The Medical Information Scientist is responsible for exceeding the medical information needs of a sub-set of customers with diverse needs in highly technical disease entity, medical economic, and/or product information areas.

#### This position requires extensive experience in the cardiovascular field. The position will be based in Southern California and will require approximately 50% travel.

If selected, you will represent our group to thought leaders within the managed-care communities. You will identify, establish and/or maintain service relationships by providing up-to-the-minute, well researched information to clinicians, investigators and institutions who impact product purchasing decisions.

We are seeking individuals with Pharm.D., Ph.D., or M.D. credentials or similar experiences who have highly developed interpersonal and computer skills as well as a commitment to public health and welfare while working in a team environment.

To respond to the position mail/fax resumes to: Position #310, Astra Merck Inc., 7300 College Blvd., Suite 308, Overland Park, KS 66210, FAX: (913) 469-1329. ATTN: Personnel Director.

We offer a highly competitive compensation and benefits package. Replies must be received by May 10, 1996. No phone calls please. We are an affirmative action/equal opportunity employer.

#### POSITIONS OPEN

#### ACNP GLAXO WELLCOME Fellowship in Clinical Neuropsychopharmacology

The American College of Neuropsychopharmacology (ACNP) is pleased to announce the ACNP/Glaxo Wellcome **FELLOWSHIP** in Clinical Neuropsychopharmacology to be awarded on or after July 1, 1996. This fellowship is intended to provide an intellectual environment for a clinical specialist to acquire formal instruction, knowledge, and skills to pursue a career in clinical neuropsychopharmacology. The goal of the ACNP/Glaxo Wellcome Fellowship is to select individuals for training in targeted areas, including an in-depth knowledge of pharmacologic mechanisms and principles of biostatistics. clinical trial methodology, pharmacoepidemiology, drug interactions, and the ethics of clinical research. This should result in physician scientists who can move between molecular mechanism-based research and clinical studies to assess therapeutic potential. Applicant must be a physician who is Board-eligible in a primary medical specialty and eligible for licensure at the proposed training site. For more information and application forms, write and fax to:

> ACNP Secretariat Neuropsychopharmacology Fellowship Department SM 320 Centre Building 2014 Broadway Nashville, TN 37203 FAX: 615-343-0662

#### OPEN RANK

West Virginia University (WVU) Department of Pathology is seeking a full-time Ph.D. or M.D. to teach and coordinate general and systemic pathology to sophomore medical students and participate in an active learning curriculum. It is expected that strong biomedical research or service in the applicant's area of expertise will be developed. Rank, salary, and academic track negotiable, depending on qualifications and experience. Send curriculum vitae and names and addresses of three references to: Dr. Mary Ann Sens, Department of Pathology, Robert C. Byrd Health Science Center, P.O. Box 9203, Morgantown, WV 26506-9203. Screening will continue until suitable candidates are selected. WVU is an Affinative Action/Equal Opportunity Employer.

#### RESEARCH SCIENTISTS (Cell Biology, Biochemistry, Screening Assays)

Receptron, Inc. is a biotechnology company with focus on the biology and regulation of receptor activity. The company has two to three positions open for **RE-SEARCH SCIENTISTS** in the areas of biochemistry, molecular biology, protein chemistry, and development of high throughput screening assays. The scientist should have three to five years of successful postdoctoral experience. Previous experience in work with hormone receptors, eukaryotic gene expression and recombinant DNA technology in general, protein purification and analysis, and tissue culture is preferable.

The company is located in the San Francisco Bay Area. Competitive compensation and benefits. Please address all applications (no telephone calls) to:

> Receptron, Inc. Cell Biology Positions 835 Maude Avenue Mountain View, CA 94043

#### PROGRAM LEADER—PLANT PATHOLOGIST United States Department of Agriculture (USDA) Cooperative State Research Education and Extension Service

The Cooperative State Research, Education, and Extension Service (CSREES) of the USDA has an opening for a **PLANT PATHOLOGIST** to provide program leadership and evaluation for Research and Extension activities linking Federal programs to the Land Grant University system. Candidates must have a Ph.D. or other degree with major study in plant pathology or a closely related field. In addition, other specialized experience is required. Closing date has been extended to June 17, 1996. For application instructions contact: **Bruce Craig**, **USDA/ARS**, **Room 1423 South Building**, 1400 In**dependence Avenue**, S.W., **Washington**, **DC 20250**. **Telephone: 202-720-6130**. USDA is an Equal Opportunity Employer.

#### POSITIONS OPEN

#### ASSISTANT PROFESSORS PHYSIOLOGY

The Department of Physiology and Biophysics at the University of South Florida College of Medicine invites applications for two TENURE-TRACK FACULTY positions at the rank of Assistant Professor to be filled during the 1996-97 academic year. Competitive full-time salary and start-up funds are available for individuals who complement the current research interests of the Department and who are using cellular or molecular techniques to study neuronal signaling mechanisms or cardiovascular physiology. Applicants must have a Ph.D. and/or M.D. degree and at least three years of postdoctoral research training. Successful applicants will be expected to establish an independent, nationally recognized research program supported by extramural funds and effectively teach medical and graduate students. Please send a cover letter indicating the specific position sought, curriculum vitae, statement of research and teaching interests with future plans, and the names of three references to: Search Committee, Department of Physiology and Biophysics, University of South Florida, College of Medicine, Tampa, FL 33612-4799. Applications must be received by July 1, 1996 to be considered. The University of South Florida is an Equal Opportunity Employer/ Affirmative Action/Equal Access Institution. Applications from women and minority candidates are strongly encouraged. Disability accommodations, contact: Dr. Dietz, Telephone: 813-974-2527/TDD 813-974-2218 a minimum of five working days in advance.

#### DIRECTOR PROGRAM IN DIABETES RESEARCH

Department of Medicine at Case Western Reserve University (CWRU), University Hospitals of Cleveland, and the V.A. Medical Center seek an outstanding INVESTI-GATOR (M.D. or Ph.D.) to develop and direct a Program in Diabetes Research. Applicants should submit curriculum vitae and names of three references to: F. Ismail-Beigi, M.D., Ph.D., Clinical and Molecular Endocrinology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4951. CWRU is an Equal Opportunity/Affinnative Action Employer. Applications from women and minority groups are encouraged.

#### ENDOWED PROFESSORSHIP REPRODUCTIVE CANCER University of California, San Francisco

The Department of Obstetrics, Gynecology and Reproductive Sciences seeks candidates holding Ph.D. and/ or M.D. degree with established basic research programs in cellular and molecular reproductive cancer. Incumbent will be expected to establish an active research laboratory and to participate in the development of a group of investigators working in reproductive oncology. The new FACULTY member will be a member of the newly formed Cancer Research Institute at UCSF/Mount Zion Medical Center. Applicants should forward a curriculum vitae, summary of current and past research activities, and names of references by July 15, 1996 to: Richard I. Weiner, Ph.D., Department of Obstetrics, Gynecology and Reproductive Sciences, University of Califor nia, San Francisco, San Francisco, CA 94143-0556. UCSF is an Equal Opportunity/Affinnative Action Employer.

#### SCIENTIFIC DIRECTOR

Major voluntary health agency seeks experienced scientist and/or physician/researcher to spearhead worldwide scientific studies and stimulate therapeutically directed research programs among individual scientists, research centers, and corporate research facilities. Must have M.D., Ph.D., or equivalent. Must be articulate and able to translate complex scientific/medical concepts into lay terms. Experience in biotech or pharmaceutical industry helpful. Candidates should respond with résumé, references, and salary: Box 66, Science, 1200 New York Avenue, NW, Washington, DC 20005.

FOREST RESEARCH COORDINATOR at the Smithsonian Tropical Research Institute (STRI) to study swamp forest and tagua palms in Panama. Requires M.S. or Ph.D. in plant ecology, conservation, or forestry and knowledge of English and Spanish. Send curriculum vitae, three letters of recommendation, and summary of career goals by May 20, 1996 to: Office of Human Resources, STRI, Unit 0948, APO AA 34002-0948, U.S.A. Inquiries to: STRIO2,gamboa.dalling@ic.si.edu; kursar@ biology.utah.edu; STRI.Tivoli.Hechados@ic.si.edu.

#### POSITIONS OPEN

The Center for Drug and Alcohol Programs (CDAP) at the Medical University of South Carolina (MUSC) is recruiting for tenure-track positions at the **ASSISTANT PROFESSOR** level. Candidates must possess a Ph.D., postdoctoral experience, and expertise in molecular and biochemical neuropharmacology. Applicants will be expected to maintain a funded research program in the general area of drug and alcohol abuse. CDAP is an expanding research, treatment, and training facility with a productive interdisciplinary research group. New laboratories and attractive start-up package. Applicants should send curriculum vitae, statement of research interests, and three letters of reference to: **CDAP Search Committee, c/o Dr. H. C. Becker, Department of Psychiatry, MUSC, Charleston, SC 29425.** Afjinnative Action/Equal Opportunity Employer.

#### FACULTY POSITION Pharmacology and Toxicology

A tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level is available in the Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University. The successful candidate is expected to develop a strong independent research program and participate in medical and graduate teaching. All research areas of pharmacology are relevant. The position will be available in the fall of 1996. Applications should include curriculum vitae, selected reprints, statement of research interests, and three letters of refeence. Review of applications will begin August 1, 1996 and will continue until the position is filled. Please send your application to: Dr. James L. Way, Chair, Search Committee, Department of Medical Pharmacology and Toxicology, Texas A&M University Health Science Center, College Station, TX 77843-1114. Equal Opportunity Employer.

#### SIGNAL TRANSDUCTION University of Kansas Medical Center

The Department of Physiology is seeking to fill a tenure-track **ASSISTANT PROFESSOR** position with an outstanding individual investigating signaling pathways involved in the regulation of cell growth, differentiation, and/or cell death. Preference will be given to individuals pursuing research related to reproduction and cancer. The successful candidate will have an opportunity to participate in an NIH-funded Center and Training Program in Reproduction and contribute to the teaching of medical and graduate students. Please send: i) a statement of future research plans, ii) curriculum vitae, and iii) three letters of recommendation to: Chair, Faculty Search Committee, Department of Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. Applications will be accepted until June 25, 1996 or until the position is filled. An Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Research is focused on the biology of streptococcal capsular polysaccharides, including environmental and genetic regulation of capsule synthesis and interactions of bacterial surface molecules with eukaryotic cells. Experience in molecular biology, cell biology, tissue culture techniques, and animal models all helpful. Send curriculum vitae and telephone numbers of three references to: Dr. Michael R. Wessels, Channing Laboratory, Brigham and Women's Hospital, 180 Longwood Avenue, Boston, MA 02115. Harvard Medical School/Brigham and Women's Hospital are Equal Opportunity/Affinative Action Employers. Women and minorities are encouraged to apply.

**POSTDOCTORAL POSITION** available to study the molecular and cellular role of opioid receptors in the function of T-cells. Studies will include a molecular analysis of receptor structure and processing. Experience and interest in immunology and molecular biology required. *Applicants must be United States citizens or have resident alien* status, Please send curriculum vitae and at least three letters of reference to: Dr. Thomas J. Rogers, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19104. FAX: 215-707-7788. An Equal Opportunity/Affimative Action Employer. We strongly encourage women and minorities to apply.

#### NATIONAL CANCER INSTITUTE NATIONAL INSTITUTES OF HEALTH, PUBLIC HEALTH SERVICE CANCER PREVENTION FELLOWSHIP PROGRAM

The **Division of Cancer Prevention and Control (DCPC)**, **NCI**, is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to train individuals from a multiplicity of health science disciplines in the field of cancer prevention and control. The program provides for: *Master of Public Health training* (at accredited university programs); participation in the *DCPC Cancer Prevention and Control Academic Summer Course* (open to physicians and scientists interested in specialized instruction on the principles and practice of cancer prevention and control); *working directly with individual preceptors at DCPC* on cancer prevention and control projects; *brief field assignments* in cancer prevention and control programs at other institutions. Funding permitting, Fellows will be accepted for up to three years of training, beginning July 1, 1997. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

#### ELIGIBILITY

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

#### OR

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

#### PLUS

The applicant must be a U.S. citizen or resident alien eligible for citizenship within four years.

For details and an application catalog either call, fax, email, or send a postcard or letter with your name, home address, and where you heard about the program to:

Douglas L. Weed, M.D., M.P.H., Ph.D. Director Cancer Prevention Fellowship Program Division of Cancer Prevention and Control National Cancer Institute Executive Plaza South, Suite T-41 6130 Executive Blvd MSC 7105 Bethesda MD 20892-7105

Further inquiries: Mrs. Barbara Redding, Telephone: (301) 496-8640; Fax: (301) 402-4863; email: reddingb@dcpceps.nci.nih.gov **DEADLINE FOR RECEIPT OF APPLICATIONS: SEPTEMBER 1, 1996** *NIH is an Equal Opportunity Employer* 



The University of North Carolina at Chapel Hill

**Distinguished Undergraduate Teaching Professorships** 

Applications, nominations and inquiries are sought for four new Kenan Distinguished Undergraduate Teaching Professorships at the University of North Carolina at Chapel Hill. These distinguished professors must demonstrate excellence and commitment as undergraduate teachers and also have a record of outstanding scholarship or artistic creativity. Distinguished professors may affiliate with any program at the University that offers an undergraduate major, including departments and interdisciplinary programs in Arts and Sciences as well as Business, Education, Journalism, Nursing, Medicine, Pharmacy and Public Health.

Selection will take place over the next 12 months with appointments anticipated to begin July 1, 1997. Applications and nominations received by **July 1, 1996** will be assured full consideration.

Applications should include evidence of teaching effectiveness along with a curriculum vitae and a letter summarizing the applicant's research and teaching interests. These should be sent to:

Office of the Provost Search Committee: Kenan Undergraduate Teaching Professorships CB #3000, 104 South Building University of North Carolina at Chapel Hill Chapel Hill, NC 27599-3000 The University of North Caroling is an Affirmative Action

The University of North Carolina is an Affirmative Action, Equal Opportunity Employer committed to fostering diversity in its faculty, staff and student body, and welcomes applications from underrepresented groups.

#### University of Minnesota Cancer Center and the University of Minnesota Bone Marrow Transplantation Program Endowed Cancer Center Chair in Bone Marrow Transplantation

The University of Minnesota Cancer Center and the University of Minnesota Bone Marrow Transplantation Pro-gram seek applications for the Endowed Cancer Center Chair in Bone Marrow Transplantation. This full-time appointment will be tenured at the Associate or full Professor level. Interested individuals must have an M.D. or a Ph.D., with a minimum of five years of postdoctoral research experience in the general areas of immunobiology, molecular biology or cellular biology, an active research laboratory and a proven record of high quality research as shown by publications in quality peer-reviewed journals. For appointment at full Professor the individual will have demonstrated leadership in a strong innovative research program receiving national recognition. The individual chosen will participate actively with Bone Marrow Transplant Program members in the investigation of basic biologic principles underlying human transplantation and in the development of new transplant-related therapies. Strong emphasis will be placed on the individual's ability to interface successfully with the multidisciplinary membership of the Cancer Center. The recipient of the chair will be a member of the Cancer Center, the Bone Marrow Transplantation Program, and have an academic appointment to the Medical School department best suited to the individual's research interest.

A complete application, including a current curriculum vitae, the names and addresses of three references, and a brief statement of research interests should be sent to: Catherine Verfaillie, M.D., University of Minnesota Cancer Center, Box 806 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455, ATTN: Cindy Prange. Last date for receipt of applications is June 14, 1996.

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

#### **Director, Corporate Scholars Program**

#### The Molecular Design Institute

#### University of California San Francisco

Applications are invited for a full-time, non-tenure track appointment in the UCSF-Molecular Design Institute to lead a new educational program that provides a customized academic forum for corporate sponsored scholars seeking advanced knowledge in the Health Sciences. This program brings established industrial scientists and researchers to UCSF for extended interchanges with our faculty and researchers in molecular modeling, molecular calculations, and structural biology. Related topics in drug delivery and molecular medicine will be presented.

Applicants must have a Ph.D. and expertise in molecular calculations and an interest in drug discovery and biotechnology. Primary responsibilities include:

- course development
- marketing/corporate recruitment
- liaison with Pacific Rim pharmaceutical and biotechnology
- companies as well as in the United States, and Europe.

A supplementary research appointment may be considered.

To apply, submit curriculum vitae and three letters of reference by June 15, 1996 to Professor Irwin Kuntz, Director, UCSF-Molecular Design Institute Box 0446, San Francisco, CA, USA, 94143-0446. Fax (415) 476-9124. http://mdi.ucsf.edu

The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

#### Director of Experimental Pathology

Tenure-track/tenured Associate/Full Professor to serve as Director of the Division of Experimental Pathology within a university-based academic Department of Pathology and Laboratory Medicine. Resources available for an eight-investigator division, devoted to innovative research and graduate education. Minimal administrative responsibilities. Includes opportunity to recruit two additional faculty at Assistant/Associate Professor levels. Applicants should hold M.D. and/or Ph.D. degree and have a record of productive, innovative and independent research in any area of the biomedical sciences. Applications should include a description of research program, curriculum vitae, and names of at least three references. Applications should be sent to:

Jeffrey S. Ross, M.D. Department of Pathology and Laboratory Medicine Albany Medical College (A-81) 47 New Scotland Avenue Albany, New York 12208



Albany Medical Center actively seeks applications from women and minorities EEO/AA employer M/F/D

#### GLOBAL CAREER OPPORTUNITIES

# 国際感覚豊かな研究者を募集します。

ドイツ・バイエル社は医薬品研究の「世界三種体制」をめざし、 '88年にアメリカの中央研究所を開設。次いで、'95年に日本の 中央研究所を誕生させた。ここでは、アレルギー・自己免疫疾患 分野を担当し、その一種を担う。21世紀には日本で発見された 新薬を世界に送り出すことを目標に、現在研究者を増員中。海外 との交流が頻繁なため、国際感覚豊かな研究者を求めています。



【間合せ先】大阪市淀川区宮原3-5-36新大阪第2森ビル バイエル薬品(株)リクルーティング(③係〒532 バイエル薬品株式会社) バイエル薬品株式会社 料10社自及び応募者は全て公平に扱われます。



## **Dean** College of Biomedical Sciences

The University of Osteopathic Medicine and Health Sciences is seeking a dean for its recently established College of Biomedical Sciences.

The dean will report to the vice president for academic and medical affairs and will be responsible for the development, implementation and administration of policies affecting faculty in the departments of anatomy, biochemistry, microbiology, and physiology and pharmacology.

Qualified applicants should: 1) have a doctoral degree in a field related to the college's departments; 2) possess excellent communication skills; 3) be willing to form educational partnerships in the community; 4) be recognized as an outstanding teacher; 5) be familiar with problem-based learning and computer-assisted instruction; and 6) have experience developing and managing budgets.

UOMHS is a private, 98-year-old institution offering education programs for osteopathic physicians (D.O. degree), podiatric physicians (D.P.M. degree), physician assistants (B.S. degree), physical therapists (M.S. degree) and health care administrators (B.S., M.H.A. degrees). Total enrollment is 1,275.

Candidates should send a letter of application, curriculum vitae and three letters of recommendation to: Paul Peter Koro, D.O., F.A.C.O.S., Interim President, UOMHS, 3200 Grand Ave., Des Moines, IA 50312-4198.

The deadline for submitting application materials is June 15, 1996.



An Equal Opportunity/Affirmative Action Institution

# DIACRIN

At **DIACRIN** a well-financed, rapidly growing leader in cellular transplantation, we're developing treatments for a variety of pathological conditions such as neurodegenerative diseases and diabetes. Due to our ongoing success, we have exciting research opportunities.

#### **Senior Scientist**

Immunologist • A Ph.D. with 5-7 years' experience in cellular and molecular immunology to lead a research effort on mechanisms of transplantation tolerance. In vitro and in vivo systems will be used to evaluate T cell function and inactivation in response to immuno-modulated xenografts. Experience with molecular approaches to cytokine analysis, models of T cell function, and in vitro systems for the study of T cell anergy or apoptosis. Strong record in experimental immunology required.

#### Scientist

Molecular Immunologist • Ph.D. with 1-3 years' experience in molecular immunology to evaluate the human immune response to xenografts. The project will involve cloning and expression of porcine genes that regulate the human immune response to xenogeneic tissues. Requires experience with cDNA libraries, mammalian expression vectors, and in vitro immunological assavs.

We offer an outstanding compensation and benefits package. Send resume to: Linda Brown, Diacrin, Inc., Navy Yard Bldg. 96, 13th St., Charlestown, MA 02129; Phone: (617) 242-9100; FAX: (617) 242-0070.

An Equal Opportunity Employer.

#### CHAIR

Human Cancer Genetics Department

A CHAIRPERSON is sought to lead the newly created Department of Human Cancer Genetics at The University of Texas M. D. Anderson Cancer Center. The candidate must be a recognized leader in the field of molecular genetics with a strong record of scholarly contributions to the field of human cancer genetics.

This highly visible department will be physically and intellectually linked to existing active programs in gene regulation and development. The mission of the new department chair will be to lead programs in the isolation of human cancer susceptibility genes, investigations of their underlying mechanisms of action and their impact on individual and population risks, studies of the basis for genomic instability and mutation in cancer development, development and application of molecular diagnostics, and related, leading-edge clinical genetics research.

This recruitment represents a commitment to building a new department of central importance to the mission of the cancer center while integrating a number of outstanding experts in the field into its efforts.

Applicants should send their curriculum vitae and expression of interest to: Dr. Louise Strong, Chairperson of the Search Committee, UT M. D. Anderson Cancer Center, 1515 Holcombe Blvd., Box 209, Houston, TX 77030.

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

# RESEAR

# RESEARCH LEADER -- ANALYTICAL R&D

Hoffmann-La Roche has an immediate opening for a Ph.D. Scientist in its Analytical R&D Department to lead a group working on methods development and validation, analysis and specification setting for therapeutic proteins. The initial assignment will be to prepare for the PLA filing of a product currently in phase III clinical trials; experience with writing CMC regulatory documents in the US and/or Europe and negotiating product specifications with regulatory agencies is an essential requirement for this position.

The individual selected for this important position will have an extensive knowledge of state-of-the-art techniques for the physicochemical analysis of proteins and of the CMC regulatory issues related to protein therapeutics. Post-doctoral research and at least five years relevant experience in the biotechnology or pharmaceutical industry is required. The ability to direct and lead laboratory scientists and participate in multidisciplinary international project teams responsible for development of drug candidates is essential.

We offer an attractive salary and benefits package. For consideration, please send your resume with salary requirements to: **Ms. Stella Strazdas, Department SS346DP, Hoffmann-La Roche, Nutley, New Jersey 07110-1199.** PRINCIPALS ONLY. No phone calls please. We are an equal opportunity employer.



# Hoffmann-La Roche

A Member of the Roche Group

Senior Management

### MEDICAL ONCOLOGIST or CLINICAL IMMUNOLOGIST

NeXstar Pharmaceuticals, Inc. is a rapidly growing pharmaceutical company engaged in the discovery, development, and marketing of products to treat life-threatening diseases. Based in Boulder, Colorado, we are a world leader in combinatorial chemistry and liposomal drug delivery and are focusing our efforts on drugs for oncology, immunology and infectious disease indications. The company employs roughly 450 people worldwide and markets two approved drugs, AmBisome and DaunoXome.

NeXstar seeks an outstanding physician with extensive training and expertise in medical oncology or clinical immunology, with broad interests in all these areas. This position will provide an important clinical/scientific interface with company research scientists and physicians, and academic physicians and scientists, both in the U.S. and in Europe. Participating in the selection of therapeutic targets, advising on the development of clinical products, helping set the standards of excellence in our clinical programs, and driving clinical programs toward successful completion of Company goals are all important parts of this job. In addition, the successful candidate will assist commercial operations, business development, and corporate communications staff in meeting corporate goals and communicating the company's progress. In addition to outstanding clinical and scientific skills, the successful candidate will have excellent written and oral communications skills.

This position will be based in Boulder, Colorado, which has a wonderful environment for biotechnology as well as the rest of life's satisfactions. NeXstar offers an attractive benefits and compensation package, including stock options and bonus eligibility. Mostly, we offer an incredible opportunity to contribute to a unique growing company that is driven to improve patients' quality of life by improved treatment of serious disease. Please send resume in confidence to:

Human Resources-Position 900 NeXstar Pharmaceuticals, Inc. 2860 Wilderness Place Boulder, CO 80301



NeXstar Pharmaceuticals is an Equal Opportunity Employer

# New & improved web site

What's the shortest distance between two points?

YOU

great career opportunities

# SCIENCE CLASSIFIED ADVERTISING ON-LINE

**What's the shortest distance between two points?** A straight line, of course. And that's exactly what SCIENCE's Classified Advertising On-line delivers: a direct link for talented scientists just like you, to the most comprehensive listing of new scientific career opportunities you can find anywhere.

#### Here's what's new:

• **New easy-to-use format:** SCIENCE now has a new easy-to-use format designed by Stanford University's Highwire Press. The new enhancements make finding great career opportunities even easier!

• **New search engine:** Now all classified ads are fully searchable in a format that allows you to narrow your recruitment search by discipline and geographic area.

• **New system enhancements:** Look for additional features and services throughout 1996 to help you find the perfect career opportunity!

Make a straight line to your computer and check out the new and improved SCIENCE Classified Advertising On-line!

http://www.aaas.org

Select SCIENCE Classified Advertising from the menu





At Searle, a subsidiary of the Fortune 500 Monsanto Company, we pride ourselves in being recognized as one of the world's foremost pharmaceutical companies. We're seeking an aggressive and talented professional to join our team in St. Louis.

#### POST-DOCTORAL RESEARCH SCIENTIST Protein Engineering

You will work closely with a cross-disciplinary team to develop novel engineered proteins. You will also participate in developing methods for gene construction, expression, selection, assay and isolation of recombinant proteins. Additional opportunities exist in the design and purification of novel proteins for structural studies.

We require a Ph.D. in Biochemistry or Biophysics along with significant experience in cloning and expression of DNA (bacterial or eukarytic). Experience with genetic selection or phage display is a definite plus.

We offer an excellent salary and benefits package. For consideration, please send your resume with salary history to: Searle, Attn: C. McWherter, 700 Chesterfield Parkway, BB3G, St. Louis, MO 63198. An equal opportunity employer.



# Ph.D. MICROBIOLOGIST

The DowElanco Department of Biotechnology and Plant Genetics has an immediate opening for an experienced, highly innovative Ph.D. microbiologist who has comprehensive technical knowledge and experience in the area of microbial interactions in the soil/plant environment. As part of an interdisciplinary team, this scientist will be responsible for technical leadership of an existing group focused on the discovery and characterization of novel micro-organisms which produce toxins useful for proprietary approaches to agricultural and urban pest control. Required technical skills will include experience in optimization of lab-scale fermentation parameters, the ability to apply knowledge of microbial physiology to non-standard laboratory micro-organisms, and expertise in the taxonomic categorization of diverse micro-organisms. Post-doctoral experience in the area of microbial pathogens of plant pests is highly desirable.

The successful candidate will join a highly productive, team-oriented group of scientists committed to the discovery of novel biologicallyderived molecules that will lead to new classes of agricultural products for the future.

In addition to a competitive compensation and benefits package, DowElanco offers challenging opportunities within a creative, stimulating, and diverse work environment. DowElanco is an affirmative action, equal employment opportunity employer.

Interested candidates should send a letter of interest, resume, transcripts, and the names, addresses and phone numbers of three references to:

Kathy McIntyre/Microb1 R&D Human Resources DowElanco 9330 Zionsville Road Indianapolis, IN 46268-1054 Deadline for submission is July 1, 1996.



#### DIRECTOR, DIVISION OF KIDNEY, UROLOGIC, AND HEMATOLOGIC DISEASES (DKUHD)

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), located in Bethesda, MD, is seeking an outstanding physician for the position of Director, Division of Kidney, Urologic, and Hematologic Diseases (DKUHD). This is a Senior Executive Service (SES) permanent full-time position with a salary range of \$100,526 to \$122,688 per annum commensurate with qualifications. Applicants must demonstrate research experience and knowledge of research programs in one or more areas related to kidney, urologic, and hematologic diseases. May be eligible for Physicians Comparability Allowance of up to \$20,000 per year. A recruitment bonus of up to 25% may be available to a non-Federal applicant. The deadline for receipt of application is July 31, 1996.

The Director, DKUHD, is the principal advisor to the Director, NIDDK, on matters and policies pertaining to research grants, contracts, training and specialized programs in kidney, urologic, and hematologic diseases including basic and applied research, training fellowships and institutional training awards, and clinical trials. Additionally, the incumbent may have the opportunity to conduct independent research projects in the area of kidney, urologic and hematologic diseases.

For more information contact Ms. Joanna Voight, NIDDK Personnel Office, Bldg. 31, Room 9A30, 9000 rockville Pike, Bethesda, Maryland 20892; (301) 496-4231.

U.S. Citizenship Required / NIH is an Equal Opportunity Employer

# Post-Doctoral Position

Magnetic Resonance Imaging

Bracco Research USA Inc., the U.S. research and development labs of Bracco S.p.A., one of the world's leaders in MRI contrast agents, has a 1 year post-doctoral opportunity, with the possibility of renewal, in its **Chemical and Biological Evaluation Department. Our** new facility in Princeton, NJ houses a SISCO 2T MRI system fitted with Accustar gradient coils, Unity console and a SparcStation 10 workstation. Image and spectral processing facilities are networked with a state-of-the-art FDDI backbone. The incumbent will participate in our Targeted MRI program, carrying out imaging studies in both physical and animal models that will define optimal pulse sequence timing parameters for Bracco's proprietary contrast agents. The incumbent will also work on selected contrast agents applied to various model systems. The successful candidate will possess a Ph.D. or M.D. degree in a related area with 1-3 years experience in MRI. For consideration, please submit your resume and a cover letter to: Human Resources,



Bracco Research USA, Inc. 305 College Road East Princeton, NJ 08540.

We are an Affirmative Action/ Equal Opportunity Employer.

#### UNIVERSITY OF SOUTH FLORIDA COLLEGE OF MEDICINE AND H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE

### PROGRAM IN OVARIAN EPITHELIAL CANCER PATHOBIOLOGY

The Department of Pathology and Laboratory Medicine and the H. Lee Moffitt Cancer Center and Research Institute at the University of South Florida College of Medicine are seeking a wellqualified Ph.D. applicant at the Assistant/Associate/Professor level with research interests in the area of Ovarian Epithelial Cancer Pathobiology. Appointment at the Assistant Professor level requires the applicant to have a minimum of two years of post-doctoral experience. Academic rank beyond that of Assistant Professor will be commensurate with qualifications and experience. This position may be tenure-earning.

As part of expansion of basic research, the Department is recruiting outstanding candidates who have completed three-to-five years of relevant postdoctoral research and are able to develop independent research in the following areas: a) cellto-cell and cell-extracellular matrix interaction during benign and malignant morphogenesis; b) genetic and molecular alterations in cancer initiation and progression; c) in vivo, including transgenic/ knock-out, and in vitro models of carcinogenesis as these areas relate to ovarian epithelial cancer pathobiology. Experience with cell cycle and morphogenesis regulators, ovarian-specific gene regulation and molecular and cell biology is desired.

Candidates are expected to participate in the graduate and postdoctoral teaching activities of the Department. Research space and support packages for a period of up to three years are available for recruited candidates. Applicants should send their curriculum vitae, a statement of their research interest and the names of three references to: Santo V. Nicosia, M.D., Professor and Chairman, Department of Pathology and Laboratory Medicine or Warren J. Pledger, Ph.D., Associate Center Director for Basic Research, H. Lee Moffitt Cancer Center and Research Institute, Office of Faculty Recruitment, 12902 Magnolia Drive, Tampa, FL 33612-9497. Applications must be postmarked by deadline date of July 5, 1996.





H. LEE MOFFITT CANCER CENTER & RESEARCH INSTITUTE University of South Florida College of Medicine

The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer. For disability accommodations please contact Jody Swanson at (813) 975-7894 a minimum of five working days in advance. TDD #813-974-2218

# DRUG METABOLISM & PHARMACOKINETICS

SmithKline Beecham is recognized as an international leader in pharmaceutical research and development. Right now, we are seeking an experienced scientist to join our innovative Biotransformation Department within the Drug Metabolism and Pharmacokinetics area.

As part of a multi-disciplinary team, the successful applicant will be responsible for the conduct of absorption, distribution, metabolism and excretion studies during late phase discovery and early phase development of novel pharmaceuticals. You will share your significant knowledge of biotransformation pathways and separation technologies appropriate to metabolite separation, quantification and identification, as well as maintain a commitment to providing high-quality verbal and written biotransformation data.

Necessary qualifications include: the minimum of a BS degree in Biochemistry, Biological Sciences or Chemistry; at least one year of industrial experience in pharmaceutical/agrochemical environment; and/or MsC or PhD. Proven expertise and a successful track record of scientific achievement in the drug biotransformation field is essential. Applicants must have good technical skills, experience working with common laboratory animal species, experience handling radiolabelled materials and familiarity with working under SOPs in a GLP compliant facility.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a highly competitive compensation, benefits and relocation package. For confidential consideration, please send resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code B6-0142, P.O. Box 2676, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.

> SB SmithKline Beecham Pharmaceuticals Challenging the natural limits.

Much of the success of Bayer Corporation, Pharmaceutical Division, is based on innovation and research. At the same time, all of our success is based on the talent and drive of our people. As an integral part of Bayer, a \$26.8 billion global leader, we have the resources to provide our employees with a supportive, state-of-the-art, multidisciplinary environment that encourages their professional growth and makes our success possible. Join our dedicated team of professionals in the following positions:

#### Graduate Scholar

We are seeking a qualified individual to study the function of presenilin gene products in the central nervous system as part of our exploratory effort in the identification of novel therapeutic target (s) for Alzheimer's disease. Duties will include biochemical and pharmacological assay development, particularly in the area of protein-protein interaction, signal transduction pathways and the role of presenilins in neurodegeneration. These positions require a Ph.D. in biochemistry, pharmacology or a related discipline. Experience in functional genomics, molecular and cellular biology would be an advantage. **Dept. ELCL** 

#### Graduate Scholar

Responsibilities include the management of several in vivo models. This could include coordinating a transgenic colony, surgically manipulating rodent CNS, and conducting biochemical procedures such as enzyme assays, receptor binding, and protein analysis (Western, EUSA).

A recent Ph.D. in neuroscience or related discipline with expertise in development and characterization of in vivo models of dementia is required. Experience with CNS molecular biological and biochemical techniques, as well as with evaluation of transgenic animals, would be an advantage. **Dept. ELRF** 

We offer attractive compensation and generous benefits. For immediate consideration, please forward a resume, including salary history, to: **Bayer Corp.**, **Pharmaceutical Division**, **400 Morgan Lane**, **West Haven**, **CT 06516.** No phone calls please. An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to creating and maintaining cultural diversity within our work environment.



# METASYN

**METASYN, Inc.** is a fast-growing pharmaceutical R&D company developing state-of-the-art injectable contrast agents for magnetic resonance imaging using the latest advances in biophysics and molecular biology.

# STAFF SCIENTIST PATÈNT LIAISON-PHD

Interact with METASYN scientists and outside patent counsel to identify, write, and prosecute inventions and patent applications. Req. PhD in scientific field, excellent writing and oral communications skills, and excellent scientific word processing and literature searching skills. Submit sample of scientific writing. Code PL

# Please send resume and cover letter with job code to:

Human Resources METASYN, INC. 71 Rogers Street Cambridge, MA 02142-1118

#### Megan Health St. Louis, MO Molecular Biologist

A biotechnology company is seeking Ph.D. and Master's level scientists to conduct research leading to the development of human and animal vaccines using avirulent Salmonella vector systems. Candidates should have several years of experience in molecular biology, preferably working with bacterial pathogens. Research experience in microbial genetics, immunology, and animal science is desirable. Familiarity with the pharmaceutical or veterinary industry, GLP and GMP would also be desirable.

Compensation and stock option package commensurate with experience. Opportunity for professional growth and increasing responsibility. Send resumes with references to **Dr. Brian L. Clevinger, Megan Health, 3655 Vista Avenue, St. Louis, MO 63110.** Materials will be kept confidential. *Megan Health is an Affirmative Action/Equal Opportunity Employer. Applications from minorities and women are encouraged.* 

# SENIOR LEADERSHIP FOR METEOROLOGY

CAREER OPPORTUNITY FOR SENIOR SCIENTIFIC MANAGER AS SUPERINTENDENT, MARINE METEOROLOGY DIVISION NAVAL RESEARCH LABORATORY, MONTEREY, CALIFORNIA (\$94,800 to \$115,700 (plus locality pay) *per annum*)

Become a member of an elite research and development community at the Naval Research Laboratory involved in basic and applied scientific research and technological development for tomorrow's Navy and for the nation.

- Manages, directs, and administers an internationally recognized scientific work force researching a broad spectrum of multidisciplinary scientific, engineering, and technical programs in numerical weather forecasting; tropical cyclone forecasting; atmospheric physics, processes, and phenomena; ocean atmospheric coupling; satellite meteorology; database management and visual information systems; and automation techniques for atmospheric analysis forecasting.
- Executive direction and technical leadership in the development of strategic plans associated with R&D programs developing all scientific and technical elements of atmospheric forecasting systems and assessing atmospheric effects on Naval systems.
- Principal consultant to the Navy, other agencies and nations on developing applications for the R&D programs under his/her cognizance.
- Applicants should be recognized as national/international authorities and should have planned and executed difficult programs of national significance or specialized programs that show outstanding attainments in their field of research.

NOTE: The Mandatory Executive Core and Technical Qualifications must be discussed in detail in order to receive full consideration for the position.

Resumes, SF-171s (Application for Federal Employment) or OF-612s (Optional Application for Federal Employment) must be Postmarked by 28 June 1996. Please Contact: Cathy Hamilton on (202) 767-3031 for application details

 Apply to: Naval Research Laboratory ATTN: HRO 96-01
 4555 Overlook Avenue SW Washington, DC 20375-5320

Navy is an Equal Opportunity Employer (Women and Minorities are encouraged to apply)

#### Assistant to the Director UNIVERSITY OF IOWA Center for Biocatalysis and Bioprocessing

The University of Iowa, Center for Biocatalysis and Bioprocessing (CBB), seeks an outstanding scientist and/or administrator to serve as Assistant to the Director of the Center. The position is available immediately. Candidates should possess an advanced degree plus knowledge and demonstrated interest in biocatalysis and bioprocessing. Outstanding interpersonal and communication skills and versatile computer networking capabilities required. Knowledge of GLP compliance for bioprocessing desirable.

The candidate will work closely with Director Jack Rosazza and Associate Director Jonathan Dordick in: overall operations, management, coordination, and continuing development and promotion of the CBB Laboratories and U of I Core Fermentation Facility; development of grants and contracts to secure industrial, federal, and state support; development of industrial minisymposia, seminars, and short courses for industrial scientists and engineers; and participation as liaison between the CBB and industry, the state of Iowa, and national biotechnology organizations.

Proposed annual salary range is \$45,000-55,000, depending on experience. Send a curriculum vitae and three letters of reference to:

Dr. John P. N. Rosazza, Director, Center for Biocatalysis and Bioprocessing, University of Iowa, Oakdale Research Park, 2501 Crosspark Road, Iowa City, Iowa 52242-5000. Phone (319) 335-4903; FAX (319) 335-4901; email: beverly-palmer@uiowa.edu.

Applications will be received until the position is filled. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

# Research Management

**National Institute for** 

**Discovery Science** 

#### Research Management (Multiple Positions)

The National Institute for Discovery Science, a private research organization, is looking for senior managers for long-term employment. NIDS will explore cutting-edge issues related to the nature and evolution of consciousness and life in the universe. Managers must be capable of emploving accepted scientific methods to novel or unconventional observations or theories while maintaining the highest ethical and quality standards. Successful candidates will have a doctoral degree and substantial experience managing complex research projects. Work will be reviewed and approved by a worldclass science advisory board. A history of successful publication is a plus. Please send resume/CV to: National Institute for Discovery Science, Dept. S, 4640 So. Eastern, Las Vegas, NV 89119

# Discover a new sequence.

Visit the SCIENCE On-line Web site and you just may find the key piece of information you need for your research. The fully searchable database of research abstracts and news summaries allows you to look through current and back issues of SCIENCE on the World Wide Web. Tap into the sequence below and see the SCIENCE On-line World Wide Web site for yourself.

# http://www.aaas.org

Select SCIENCE from the menu.



#### **New York Sea Grant Director Search**

The State University of New York (SUNY) and Cornell University invite applications for the full-time position of Director of the New York Sea Grant Institute, a cooperative program of these two universities and part of NOAA's National Sea Grant College Program. The Director is based at the State University of New York at Stony Brook and reports to the Chancellor of SUNY and the President of Cornell University through a Board of Governors.

**Responsibilities:** The Director provides overall leadership for the development, conduct and evaluation of the entire spectrum of research, education, communications, training and extension activities undertaken by the Institute. In collaboration with the Associate Director/Extension Program Leader located at Cornell and the Assistant Director, the Director carries out a variety of leadership and management responsibilities. The Director manages a budget of over \$3.0M from both federal and state sources.

Qualifications: The Director must have a demonstrated record of progressively responsible administrative and managerial experience, effective leadership skills and a knowledge of the federally funded research process. An understanding of, experience with, and dedication to university outreach or extension activities are essential. Familiarity with an existing Sea Grant program and the Sea or Land Grant mission is highly desirable. The Director also must have a distinguished record of scholarly accomplishments in a marine- or Great Lakes-related discipline that could qualify him/ her for a faculty appointment in the Marine Sciences Research Center at the State University of New York at Stony Brook. A doctorate or appropriate equivalent degree is required. Ability to communicate effectively with diverse audiences, both orally and in writing, is also required. Salary and benefits are competitive and commensurate with experience and qualifications.

Application Procedure: Nominations and applications are invited. Applicants should submit a letter of application/interest, a current curriculum vitae, and the names, addresses and telephone numbers of at least three references to:

Dr. J. Kirk Cochran, Co-Chair, NYSGI Director Search Committee, c/o New York Sea Grant Institute, 115 Nassau Hall, SUNY Stony Brook, Stony Brook, NY 11794-5001

Closing date for applications is June 15, 1996, or until a suitable candidate is selected.



#### Applications Development/ Business Development

Symyx Technologies is a rapidly growing, well-financed, start-up company dedicated to the development of combinatorial discovery technologies within the field of materials science. We are seeking to hire one individual who will identify and analyze commercial opportunities for novel materials as well as for devices containing novel materials across a broad range of industries. The diversity of applications will span general areas such as electronics, communications, chemicals, and semiconductors. The position requires both a strong technical background and more than 5 years of experience related to the commercial application of at least one material or corresponding device. The individual should have an advanced technical degree, preferably in either chemistry, physics, materials science, or an engineering discipline.

Symyx Technologies offers equity participation, competitive salary & benefits commensurate with experience, and a truly exciting corporate environment. Interested candidates should send a resume to:

Symyx Technologies Attn: Isy Goldwasser 420 Oakmead Parkway Sunnyvale, CA 94086



Equal Opportunity Employer

#### Search Committee for Chair Department of Obstetrics and Gynecology School of Medicine

#### The University of North Carolina at Chapel Hill

The School of Medicine of The University of North Carolina at Chapel Hill is searching for an individual to chair the Department of Obstetrics and Gynecology and to provide continued scholarly, academic and administrative leadership to its already outstanding and existing programs. The nationally recognized department has an established residency program providing for a total of 24 residents with three approved fellowship programs plus a fellowship program in urogynecology. The department has excellent facilities and strong collaborative relationships with other departments, research centers and programs within the University. The clinical activities of the department are mostly housed in the UNC Hospitals and The University of North Carolina AHEC (Area Health Education Centers). An entirely new clinical facility for women is under construction and will be completed before the year 2000. Other academic and industrial institutions in the Research Triangle enhance the scientific and diverse environment.

Minimum qualifications include an MD degree, a distinguished record of clinical excellence, creative research productivity, administrative skills, and a commitment to medical education and community service. Letters nominating qualified candidates are requested. Letter of interest, curriculum vitae and the names/ addresses/phone numbers of four or more references from qualified candidates are welcomed. Reply to Roberta Williams, MD, Chair, Department of Obstetrics and Gynecology Search Committee, c/o Office of the Dean, School of Medicine, CB# 7000 MacNider Hall, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27599-7000 (Attention: H. Wilson). The University is an Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

# CHAIR OF RADIATION ONCOLOGY

Associate Professor or Professor Level

The Cancer Institute of New Jersey at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School invites applications for the position of Chair of the newly formed Department of Radiation Oncology. We are seeking an outstanding academic physician who has made a significant contribution to cancer research or treatment and has demonstrated strong administrative ability. The Chair will have primary responsibility for building the clinical, research, and training programs.

The Cancer Institute of New Jersey has been designated by the National Cancer Institute (NCI) as a planning site for one of its comprehensive cancer centers. The Cancer Institute is developing a statewide network of health care and scientific partners to provide state-of-the-art clinical care and to conduct world-class cancer research.

Applicants should submit curriculum vitae to: Ms. Cheryl Aboyme, Human Resources, The Cancer Institute of New Jersey, 303 George Street, Suite 501, New Brunswick, NJ 08901. UMDNJ is an Affirmative Action/Equal Oppor-



tunity Employer, m/f/d/v, and a member of the University Health System of New Jersey. Minorities and women are encouraged to apply.

#### POSITIONS OPEN

TWO POSTDOCTORAL positions available (one immediately, the other on January 1, 1997). Molecules important for the development and maintenance of the nervous system are being analyzed in rodents, using modern molecular biology (gene targeting, yeast-two hybrid system, viral vectors) and cell biology (immunoultramicroscopy, confocal laser-scanning microscopy) techning proteins expressed by interneurons in the brain. Applicants should have extensive experience in one of the two fields of research. Send letter of application, curriculum vitae, and the names of three references to: Marco R. Celio, M.D., Chairman, Institute of Histology and General Embryology, University of Fribourg, CH-1705 Fribourg, Switzerland. Telephone: +41 37 29 84 90; FAX: +41 37 29 97 32; Email: marco.celio@ unifr.ch.

#### POSTDOCTORAL FELLOW

**POSTDOCTORAL FELLOWSHIP**. Immediate opening for NIH-sponsored fellowship to study role of DNA conformation, chromatin structure, and nuclear architecture in selection of DNA targets by enediyne anticancer drugs and other radical-mediated genotoxins. Prefer recent Ph.D. experienced in DNA biochemistry and PCR. Send, FAX, or Email curriculum vitae, three letters of reference, and statement of research experience to: **Prof. Peter Dedon, Division of Toxicology, 16-336, MIT, Cambridge, MA 02139. FAX: 617-258-8676; Email: pededon@mit.edu.** U.S. ditacuslip or permaneut reisdency required. *MIT is an Equal Opportunity/Affinative Action Employer.* MIT is a non-smoking environment.

#### POSTDOCTORAL POSITION National Institute of Allergy and Infectious Diseases National Institutes of Health

Position available August 1, 1996 for Ph.D. and/or M.D. with training in virology, molecular biology, and genetics to do research on the molecular pathogenesis of Simian and Human Immunodeficiency Viruses (SIV and HTV-1) using animal models. This position offers indepth training leading to ability to pursue original, independent research. Send curriculum vitae and three references to: Dr. Vanessa Hirsch, 2441 Parklawn Drive, Rockville, MD 20852.

**POSTDOCTORAL POSITION** available immediately to 1) develop an integrated quantitative fluorescence imaging and electrophysiology instrument, and 2) study development and regulation of transmembrane transport processes involved in intracellular pH and cell volume regulation in mammalian embryos (see, e.g., *J. Biol. Chem.*, **270**:24428, 1995). Funded by the Whitaker Foundation. Previous experience with patch-clamp techniques is required; experience with quantitative imaging is desirable. Send curriculum vitae to: **Dr. Jay M. Baltz**, **Loeb Medical Research Institute**, **1053 Carling Avenue**, **Ottawa**, **Ontario**, **K1Y 4E9 Canada**. **FAX:** 613-**761-5327; Email: jay@civich.ottawa.on.ca.** 

**POSTDOCTORAL POSITIONS** are available to conduct studies on the bZIP transcription factor Nrl and on proteins involved in retinal dystrophies. Research experience in transgenic mice or knockout techniques, yeast genetics, protein purification, or neurobiology is highly desirable. Competitive salary plus benefits. Send curriculum vitae and names of three references to: Anand Swaroop, Ph.D., Department of Ophthalmology and Human Genetics, University of Michigan, 1000 Wall Street, Ann Arbor, MI 48105. FAX: 313-747-0228; Email: swaroop@unich.edu. The University of Michigan is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to study radiation-induced transcriptional activation and signal transduction mechanisms using antisense technology. We are particularly interested in applying adenovirus-mediated gene delivery to study nuclear protein kinase/phosphatase-mediated events. Experience in molecular biology essential; tissue culture and virology prefeasble. Please send curriculum vitae and names of three references to: Dr. Kristoffer Valerie, Department of Radiation Oncology, Box 980058, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA 23298. Email: KVALERIE@GEMS. VCU.EDU. Equal Opportunity Employer.

#### POSITIONS OPEN

#### **RESEARCH ASSOCIATE POSITIONS/NMR**

The Biomedical NMR Laboratory at the Howard University invites applications for two **RESEARCH ASSO**-**CIATE** positions in NMR. Areas of intended research include: 1) drug metabolism, water movement in plants, 2) probe design using high temperature superconductor material. Applicants should have a recent Ph.D. and extensive research training in NMR. Familiarity with 1) pulse sequence generation, localized spectroscopy, flow, microscopy imaging and back-projection techniques, and 2) probe design, cryogenics, cell culture and animal tumor model is desired. The laboratory has a 200 MHz/33 cm and a 300 MHz/89 mm machine. The laboratory is highly interactive and mission oriented. The salary is commensurate with experience. Interested candidates should send curriculum vitae and the names of three references to: Paul C. Wang, Ph.D., Department of Radiology, Howard University, 2041 Georgia Avenue, NW, Washington, DC 20060. Telephone: 202-865-3711; FAX: 202-865-3722; Email: pwang@cldc.howard.edu.

Ion Channel and Function. Applicants should have a strong background in physiology, biophysics, or molecular biology, preferably with experience in site-directed mutagenesis and patch clamp recording. The position is in a multidisciplinary group working on glutamate receptors and ion channels. A Ph.D. or M.D. degree awarded within the last five years is required. Competitive salary, benefits, and environment. Send curriculum vitae, letter describing background and training, and three letters of reference to: Dr. M. L. Mayer, LCMN, Building 49, Room 5A78, NIH, Bethesda, MD 20892. Email: mlm@helix.nih.gov. Position available October 1, 1996.

**POSTDOCTORAL POSITION**—Virologist/Biochemist position for structural, functional, and genetic studies of the baculovirus major envelope protein. Studies involve in vitro mutagenesis, receptor binding, membrane fusion, protein structure, and generation of mutant viruses. Experience in virology, molecular-cellular biology, and/or protein biochemistry preferred. Send curriculum vitae, reprints, and names and addresses of three references to: Dr. G. Blissard, Boyce Thompson Institute at Cornell University, Tower Road, Ithaca, NY 14853-1801. Telephone: 607-254-1366; Email: gwb1@ cornell.edu. Affinnative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** available: 1) To use electron microscopy to analyze the structure of the DNA replication fork. Work to involve collaborations with **Robert Lehman** (HSV-1), **Nancy Nossal** (T4), **Charles McHenry** (E. coli), and **Charles Richardson** (T7). Will also involve studies of mutant proteins and biochemical analysis. Background in DNA-proteins interactions or electron microscopy required.

2) Studies of the structure of integrated HIV-1 DNA, and the unusual chromatin structure of triplet repeats that expand in myotonic dystrophy and fragile X diseases. To involve tissue culture, chemical probing, and EM. Submit curriculum vitae and three letters of reference to: Dr. Jack Griffith, Lineberger Comprehensive Cancer Center, University of North Carolina, Chapel Hill, NC 27599-7295. The University of North Carolina at Chapel Hill is an Affirmative Action/Equal Opportunity Employer.

SIX positions available to study the cellular and molecular mechanisms of leukocyte response in normal and tumor-bearing host. Areas of interest include: cytokineregulated leukocyte function; T-cell dependent antitumor vaccine therapy; regulation of leukocyte recruitment; monocyte/macrophage activation and antigen presentation. Applicants must have strong background in either cellular and/or molecular immunology, M.D. or Ph.D. degree, and less than five years of postdoctoral experience. Located Frederick. Please submit your applications to: Dr. John Ortaldo, NCI-FCRDC, Building 560, Room 31-93, Frederick, MD 21702-1201. Tclephone: 301-846-1323; FAX: 301-846-1673. NIH is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately for a Ph.D. or equivalent with experience in molecular and/or cellular immunology (flow cytometry, sequencing, cytokine assays, etc.) to study the generation of memory B cell responses. Send curriculum vitae and three letters of reference to: Dr. Phyllis-Jean Linton, Sidney Kimmel Cancer Center, 11099 North Torrey Pines Road, Suite 250, La Jolla, CA 92037. Equal Opportunity Employer.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITION Plant Ecology and Environmental Science

Villanova University seeks an individual to participate in the teaching of a graduate-level course in Plant Ecology in the fall of 1996 and to develop and team-teach an undergraduate, one-semester lecture/laboratory Arts and Sciences core curriculum course for non-science majors in Environmental Science in the spring of 1997. The **POST**-DOCTORAL will be encouraged to conduct research and to assist in directing undergraduate student research while at Villanova. This position, envisioned as a 50/50 teaching/research appointment, is designed to provide experience to a recent Ph.D. recipient in an academic environment that encourages faculty/student interaction both within and outside the classroom. The position requires the Ph.D. degree at the time of appointment. Applicants should submit a curriculum vitae; a statement of professional goals with regard to teaching and research in an academic setting; and the names, addresses, telephone numbers, and Email addresses of three potential referees to: Dr. R. Kelman Wieder, Department of Biology, Villanova University, Villanova, PA 19085. Telephone: 610-519-4856; Email: Wieder@ucis.vill.edu). To receive full consideration, applicants should submit materials by May 31, 1996.

Candidates should be sensitive to Villanova University's goals as an independent Catholic University founded by the Augustine Order. The University is an Affinnative Action/Equal Opportunity Employer; women and minority candidates are especially encouraged to apply.

#### THREE POSTDOCTORALS AND ONE INSTRUCTOR/RESEARCH ASSOCIATE POSITION

**POSTDOCTORALS** will work on a) functional analysis and assembly of apolipoprotein B, or b) structure function analysis of apolipoprotein E, or c) transcriptional regulation of apolipoprotein genes. Experience in molecular biology, protein and cell culture techniques, or prior training in transpenic methodologies. Salary: NIH scale.

training in transgenic methodologies. Salary: NIH scale. RESEARCH ASSOCIATE will teach graduate courses on protein structure and function and will conduct research on apolipoprotein E and its interactions with intracellular or secreted proteins. Requires Ph.D. in molecular biology and demonstrated ability in molecular biology, protein chemistry, and/or transgenic methodologies. Salary: \$30,000 to \$36,000 range, depending on qualifications.

References: J. Biol. Chem., 267:16553; Biochemistry, 32: 9080; PNAS, 92:659. Send curriculum vitae to: Dr. V. Zannis, Molecular Genetics, W509, Boston University Medical Center, Boston, MA 02118-2394.

POSTDOCTORAL POSITION available immediately to study cellular and molecular mechanisms of vascular matrix remodeling in atherosclerosis and hypertension. Previous experience in molecular biology and biochemistry is required. Persons interested must send curriculum vitae and indicate three references to: Zorina Galis, Ph.D., Division of Cardiology, Emory University School of Medicine, 319 WMB, 1639 Pierce Drive, Atlanta, GA 30322. Email: zgalis@emory.edu. Emory University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL FELLOWSHIP** is available to study the effects of mechanical deformation on gene expression and tumor biology of transformed cells. Expertise in cell biology and molecular biology is preferred. The successful applicant will work with a growth factor research group (laboratory of **Jung San Huang**) in the Department of Biochemistry and Molecular Biology. Send curriculum vitae and the names and addresses of three references to: **Frank E. Johnson, M.D., Department of Surgery, St. Louis University Medical Center, 3635 Vista, St. Louis, MO 63110-0250. Telephone: 314-577-8316; FAX: 314-771-1945.** *St. Louis University is an Equal Opportunity Employer.* 

NIH-funded **POSTDOCTORAL POSITION** is available immediately to study transfer of prodrug-activating genes into tumor cells *in vitro* and *in vivo* as well as potential therapeutic applications (see *Cancer Res.*, **54**: 5745, 1994 and *Clinical Cancer Res.*, **1**:1171, 1995). Candidate should have a Ph.D. or M.D. with background in molecular biology, cell biology, and molecular pharmacology. Send curriculum vitae, cover letter, and three references to: **E. Antonio Chiocca, M.D., Ph.D., Molecular Neurogenetics Unit, Massachusetts General Hospital—East Building, 13th Street, Charlestown, MA 02129. FAX: 617-726-5736.** 

#### **GLOBAL CAREER OPPORTUNITIES**



### SAINSBURY FELLOWSHIPS IN THE LIFE SCIENCES

Are you a high flyer aspiring to the senior levels of management?

# Have you a personal development plan for achieving your goal?

In collaboration with the Gatsby Charitable Foundation, The Royal Academy of Engineering is looking to fund the best plans submitted by individual scientists working in the Agri-/Bio-/Food and Pharmaceutical Industries.

# For preliminary discussion or application details contact:

Ian Bowbrick Manager, Professional Development, The Royal Academy of Engineering, 29 Great Peter Street, Westminster, London, SWIP 3LW. Telephone: 0171 222 2688 Fax: 0171 233 0054

#### PROGRAM LEADER AND RESEARCH SCIENTISTS IN AGRICULTURAL BIOTECHNOLOGY

#### Academia Sinica, Taipei, Taiwan

The Biotechnology Program at Academia Sinica consists of two components: agricultural biotechnology and biomedical biotechnology. The Agricultural Biotechnology Program is seeking applications from qualified scientists to serve as Program Leaders and Research Scientists. Initially, this program will be accommodated within the five existing Life Science Institutes, i.e., Biological Chemistry, Biomedical Sciences, Botany, Molecular Biology, and Zoology. In the near future, the Academy intends to establish a new Institute of Biotechnology.

There will be five areas within Agricultural Biotechnology; they are plant, floriculture, aquaculture, animal, and environment. For the fiscal year beginning July 1, 1996, the Academy intends to recruit one Program Leader and up to three senior and three junior Research Scientists.

Requirements for the positions include a Ph.D. degree. The Program Leader and the senior Research Scientists must have at least ten years of research experience with demonstrated abilities in applied and/or basic research in one of the areas indicated above, evidence of creativity, and familiarity with the Taiwan environment and language. The junior Research Scientists must have at least two years of postdoctoral training. Applicants are expected to conduct research in selected areas of biotechnology. Applications should include a cover letter, a complete curriculum vitae, and the names, addresses, and telephone numbers of 5 references. Review of applications will begin on June 1, 1996, and will continue until suitable candidates are recruited.

Applications should be addressed to:

Agricultural Biotechnology Search Committee, Office of the President, Academia Sinica, Taipei 115, Taiwan, ROC.



The Nestlé Research Center at Lausanne, Switzerland has a two years position for a

### **Biochemical Toxicologist**

for studies in safety evaluation of dietary contaminants. A Ph.D. is required in toxicolgy or related field. Experience in characterization of phase I & II enzymes, metabolism, mutagenesis & analytical chemistry is desired.

The successful candidate should also demonstrate creativity, good written and oral communication skills.

Please send curriculum vitae, letter of interests and three references (names, address and telephone)

to Nestlé Research Center, Human Resources departement, P.O. Box 44, CH - 1000 Lausanne 26

#### The Max Planck Institute of Psychiatry Clinical Institute in Munich

invites applications for positions of

RESEARCH GROUP LEADERS

#### in the fields of

#### MOLECULAR GENETICS

with focus on the development of conditional mouse mutants suitable for studies of abnormal cognition and behaviour and their response to drug interventions;

#### CELL BIOLOGY

with focus on neurodegeneration, neuroprotection, and neurotoxicity of humoral factors and of drugs;

#### IN VIVO NUCLEAR MAGNETIC RESONANCE

including the utilization of NMR imaging and spectroscopy to study structural, biochemical, and hemodynamic changes in the living brain under clinical and experimental conditions (the applicant must be a neuroradiologist and should have experience in NMR technology, including F-MRI and protonspectroscopy)

from recent graduates who should have several years of postdoctoral experience and outstanding records of achievement in one of these research areas.

The successful candidates are expected to establish and direct an independent research program and should be willing to work in a scientific environment that is primarily devoted to studies of pathogenesis of nervous disorders and their treatment. The positions, which are for 5 years, correspond to C3 scale of the Bundes-Besoldungsgesetz, and are roughly equivalent to assistant professorships (US) or university readerships (UK). There are no teaching commitments.

The groups will have modern laboratory facilities, operating expenses, and funding for scientific and technical co-workers.

Applications, including a tabular curriculum vitae, list of publications, and a description of major scientific achievements and future research plans, should be submitted by May 31, 1996. Applications should be addressed to Personnel Office, Max-Planck-Institute of Psychiatry, Clinical Institute, Kraepelinstr. 2-10, D-80804 Munich, Germany. Code: Prof. Dr. Florian Holsboer.

#### POSITIONS OPEN

#### OPTICAL BIOSENSOR RESEARCH RESEARCH ASSOCIATE University of Maryland at College Park

The Electrical Engineering Department at the University of Maryland, College Park, is seeking a **POSTDOC**-**TORAL RESEARCH ASSOCIATE** to participate in a collaborative research program on optically based biosensors being carried out in conjunction with the Army Research Laboratory in Adelphi, Maryland. The research is currently being carried out on the College Park campus. The candidate should have expertise in biochemistry or molecular biology techniques appropriate to developing surface-specific binding assays using either antibody/antigen, enzyme/substrate, or sequence-specific hybridization. Experience in dealing with fluorescent chromophores or surface chemistry is also very desirable. The research is being carried out by an interdisciplinary team of engineers, physicists, and life scientists.

This is a multi-year supported research program and there is a possibility of a permanent position in the future for highly qualified individuals who hold United States citizenship. Salary will be commensurate with experience. Interested individuals should write or Email by June 3, 1996 to: Professor Christopher C. Davis, Electrical Engineering Department, University of Maryland, College Park, MD 20742. Telephone: 301-405-3637; FAX: 301-314-9281; Email: davis@eng.umd.edu.

The University of Maryland at College Park is an Equal Employment/Affirmative Action Employer, Women and minorities are especially invited to apply for this position.

#### POSTDOCTORAL POSITION Neuroscience

A POSTDOCTORAL POSITION is immediately available to study determinants of synaptic organization in the olfactory bulb glomerulus. Approaches currently being employed in the laboratory include confocal microscopy of calcium gradients, immunocytochemistry, electron microscopy, and tissue culture. Experience in one or more of these approaches or in molecular biology is desirable. Please send curriculum vitae and the names of three references to: Charles A. Greer, Ph.D., Sections of Neurosurgery and Neurobiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8039. Telephone: 203-785-4034; FAX: 203-737-2159; Email: charles\_greer@quickmail.yale. edu. Yale University is an Affirmative Action/Equal Opportunity Employer. Minorities and uwnen are encouraged to apply.

POSTDOCTORAL POSITION available in August 1996 to study tyrosine kinase signaling in human breast cancer and breast development. Emphasis is on biochemical and molecular characterization of pathways regulating oncogenesis and differentiation. Requirements: recent Ph.D./M.D. with strong background in mammalian cell transfection, mutagenesis, and cellular biochemistry. Send cover letter, curriculum vitae, and three references to: Angel Lee, M.D., Ph.D., Department of Biochemistry and Molecular Biophysics, Box 8231, Washington University Medical School, St. Louis, MO 63110. Email: lee@bcserv.wustl.edu. Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study excitotoxicity in the retina. Cell culture, whole animal, and fluorescent imaging techniques will be used to study excitotoxic damage to central neurons. Interested applicants should forward a curriculum vitae and three letters of recommendation to: Evan Dreyer, M.D., Ph.D., Howe Laboratory, Massachusetts Eye and Ear Infirmary, Harvard University, 243 Charles Street, Boston, MA 02114. Email: edreyer@macmail.meei.harvard.edu.

#### POSTDOCTORAL FELLOW

For the identification of ataxia genes (Pulst et al., Naturegenetics, 1993) and the analysis of familial brain tumors (Sainz et al., Hum. Mol. Genet., 1994), we are looking for Ph.D. with established background in positional cloning and molecular genetics. FAX curriculum vitae and three references to: Cedars-Sinai Medical Center, Job Number 1950737, FAX: 310-967-0130; Email: Pulst@CSMC.EDU.

We seek to fill **TWO POSITIONS** for Ph.D.'s with experience in cellular immunology and molecular biology to work in a neuroimmunology laboratory on multiple sclerosis. Please send curriculum vitae to: Neuroimmunology Research 151-D, Portland Veterans Affairs Medical Center, 3710 SW U.S. Veterans Hospital Road, Portland, OR 97201. We are an Affirmative Action/ Equal Opportunity Employer.

#### POSITIONS OPEN



#### POSTDOCTORAL POSITION Nucleic Acids NMR

Available immediately, as member of RNA research team, structure/design, protein interaction. Applicants should have macromolecular NMR experience. Our equipment includes: 500 MHz (three-channel, three-axis gradients) NMR, workstations, software for processing data and restrained molecular dynamics, and molecular modeling. Competitive salary, commensurate with experience. Reply with detailed résumé, date available, experience sent to: Dr. Paul F. Agris, Biochemistry, Box 7622, North Carolina State University, Raleigh, NC 27695-7622 U.S.A. Email: Agris@bchserver.bch. ncsu.edu.

**POSTDOCTORAL POSITION** to study tyrosine kinases in synapse formation and function at the neuromuscular junction. Two kinases, Fyn and Fyk, that phosphorylate the acetylcholine receptor will be studied using molecular and cellular approaches. Projects involve investigating the 1) regulation of Fyn and Fyk by innervation and extracellular factors, 2) signal transduction cascade, and 3) role of Fyn and Fyk in acetylcholine receptor expression, clustering, and channel kinetics. **Dr. S. Swope, EPO8 Research Building, Georgetown University Medical Center, 3970 Reservoir Road, Washington, DC 20007**.

POSTDOCTORAL POSITION is available to clone and characterize novel G-protein coupled receptors that are coupled to the cardiac voltage-dependent Na<sup>+</sup> channel. Experience in protein biochemistry, electrophysiology, or molecular biology is necessary. Send curriculum vitae and three letters of recommendation to: Thomas Frielle, Ph.D., Department of Pharmacology, P.O. Box 850, Penn State University College of Medicine, Hershey, PA 17033. FAX: 717-531-5013; Email: tjf2@email.psu.edu. Equal Opportunity/Affinnative Action Employer; minorities and females encouraged to apply.

POSTDOCTORAL POSITION available immediately in  $B_{12}$ -dependent ribonucleotide reductase protein purification, kinetics, and bio-organic/bio-inorganic chemistry. Hardworking, energetic team-worker required, with excellent experimental, writing, and oral communication skills. Send curriculum vitae, names of three references, plus preferred starting date by the May 31, 1996 closing date. Professor Richard G. Finke, Department of Chemistry, Colorado State University, Ft. Collins, CO 80523. Email: rfinke@lamar.colostate.edu.

**POSTDOCTORAL POSITION** available for a motivated individual to study gene expression in human neutrophils. Applicants should have a Ph.D., M.D., or equivalent and experience in molecular biology. This NIH grant-funded position is available July 1, 1996. Send curriculum vitae and three letters of reference to: Dr. H. Hank Simms, M.D., Department of Surgery, Brown University, Rhode Island Hospital, APC-103, 593 Eddy Street, Providence, RI 02903. Affirmative Action/ Equal Opportunity Employer.

#### POSTDOCTORAL FELLOWSHIP

**POSTDOCTORAL** position available at Boston University School of Medicine. The studies focus on regulation of extracellular matrix production by lung fibroblasts using cellular and molecular approaches. Interested candidates should send their curriculum vitae to: **Ronald H. Goldstein, M.D., Pulmonary Center (R-312), 80 East Concord Street, Boston, MA 02118**.

CLINICAL CHEMISTRY POSTDOCTORAL FELLOWSHIPS at Mayo Clinic. Seeking applicants for two-year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1996 will be considered for appointment beginning in July 1997. Contact: Mary F. Burritt, Ph.D., Division of Clinical Biochemistry and Immunology, Mayo Clinic, Rochester, MN 55905, for more information.

Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

#### POSITIONS OPEN

#### NATIONAL INSTITUTES OF HEALTH National Institute of Environmental Health Sciences Postdoctoral Position

#### Signal Transduction/Protein Purification

This laboratory focuses on the regulation of cell physiology by inositol phosphates. A recent major achievement is the demonstration that inhibition of calcium-dependent chloride secretion by  $Ins(3,4,5,6)P_4$  represents a new field of signal transduction that controls salt and fluid secretion, osmoregulation, neurotransmission, and cardiac activity; pharmacological intervention is relevant to cystic fibrosis. Copies of manuscripts in press relating to this work are available upon request. The successful applicant (up to five years of postdoctoral experience) will contribute to purification and characterization of the  $Ins(3,4,5,6)P_4$ , synthesis and metabolism. Please send a curriculum vitae and three references to: Dr. Steve Shears, Inositol Phosphate Section, LCMP, NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709. FAX: 919-541-0559; Email: SHEARS@NIEHS.NIH.GOV.

#### POSTDOCTORAL FELLOW

University of California, San Francisco (UCSF). **POSTDOCTORAL** position available immediately to study regulation of molecular chaperone expression, focusing on mechanism of transcriptional regulation by ethanol. Goals include identification of ethanol-responsive transcription factors and signaling cascade involved in ethanol action. Experience in molecular biology is required. Experience with transcriptional regulation and signal transduction is preferred. Applicants must have a Ph.D. in biochemistry, molecular biology, or related field. Send curriculum vitae, brief summary of research experience, and three letters of reference to: Michael F. Miles, M.D., Ph.D., University of California, Department of Neurology, Building 1, Room 101, 1001 Potrero Avenue, San Francisco, CA 94110. Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for studies elucidating novel tyrosine kinase functions in-volved in epithelial cell differentiation in the lung. The emphasis of research is to provide the foundation for the rational development of in litero gene therapeutic strategies for cystic fibrosis (CF) through a better understanding of progenitor/stem cells and mechanisms of cellular differentiation in the airway (Development, 121:2031-2046, 1995) Applicants must have experience in molecular biology and cDNA cloning. A second position is also available to study recombinant AAV integration biology in airway progenitor cells and applications for in utero gene therapy for CF. The Institute for Human Gene Therapy offers an exceptional environment and resources for postdoctoral studies. Interested candidates should send curriculum vitae and three letters of reference to: John F. Engelhardt, Ph.D., University of Pennsylvania, Room 305 BRB1, 422 Curie Boulevard, Philadelphia, PA 19104-6069. Affirmative Action/Equal Opportunity Employer/ADA.

**POSTDOCTORAL OPPORTUNITY** available in the Markey Center for Cell Signaling for biochemist with background in protein chemistry and interest in kinases, phosphatases, or G-proteins. Experience in FPLC, membrane preparation, or characterization of non-tagged proteins a plus. Candidates must have published first-author papers in good journals and must be able to start by September 1, 1996. Send letter of inquiry, curriculum vitae, and three references to: Dr. T. W. Sturgill, University of Virginia Health Sciences Center, Markey Center for Cell Signaling, Box 577, Charlottesville, VA 22908. FAX: 804-924-9659. An Equal Opportunity/ Affirmative Action Employer.

**RESEARCH ASSOCIATE**—Organic Chemistry: to develop new protective groups, coupling reagents, and additives for peptide synthesis. Requires a strong background in synthetic and mechanistic organic chemistry and at least two years of relevant postdoctoral work. Experience in solution and solid phase peptide synthesis with analysis by HPLC, MS, and high field NMR. Experience in racemization control via 7-azabenzotriazole and acid fluorides as well as knowledge of organosilicon chemistry important. Salary commensurate with experience; \$24,000 to \$32,000 per year. Send curriculum vitae, list of publications, and three recommendation letters to: Search Committee, Department of Chemistry, Box 1414, University of Massachusetts, Amherst, MA 01003. Equal Employment Opportunity/Affirmative Action Employmer.

#### POSITIONS OPEN

#### COLLEGE OF PHYSICIANS AND SURGEONS COLUMBIA UNIVERSITY Molecular Basis of Cancer

POSTDOCTORAL/RESEARCH SCIEN-TIST positions available to join interactive research team studying novel genes involved in oncogenesis and cell differentiation (see MCD, 2:221-239, 1994; JNCI, 86:91-98, 1994; PNAS, 92:6778-6782, 1995; Oncogene, 10:1855-1864, 11:1179-1189, 1995). Expertise in molecular biology and biochemistry required. Send curriculum vitae and three letters of reference to: Dr. Paul B. Fisher, Departments of Pathology and Urology, Columbia University, College of Physicians and Surgeons, PH STEM-10, 630 West 168 Street, New York, NY 10032. FAX: 212-305-8177. Equal Opportunity Employer.

#### POSTDOCTORAL SCIENTIST National Institute for Environmental Studies Environmental Health Sciences Division

Applications are invited for one- to two-year **POST-DOCTORAL** positions, supported by STA Fellowship, for research into 1) the physiological and toxicological roles of metallothionein, or 2) estrogenic activities of organochlorine compounds with special reference to the male reproductive system. Experience in molecular biology, biochemistry, and cell biology would be an asset. Before application, please read carefully details of the eligibility and application conditions (*Science*, **271**, 29 March 1996).

Applications including a curriculum vitae, list of publications, and the names of two references should be sent to: Dr. C. Tohyama, Director, Environmental Health Sciences Division, NIES, 16-2 Onogawa, Tsukuba 305, Japan. FAX: +81-298-50-2574; Email: ctohyama@nies.go.jp.

#### POSTDOCTORAL POSITION

Thomas Jefferson University has a **POSTDOC-TORAL** position available to study cellular regulation of heterotrimeric G proteins with emphasis on subcellular localization and covalent modifications (*JBC*, **27**0:503, 1995; *Cell*, 77:1063, 1994). Candidate should have back-ground in molecular biology, biochemistry, and/or cell biology and have a strong interest in signal transduction. Please forward curriculum vitae and names, addresses, and telephone numbers of three references to: **Phil Wedegaertner**, **Ph.D.**, **Department of Cellular and Mo**lecular Pharmacology, S-1222, Box 0450, University of California, San Francisco, CA 94143. Email: pwede@itsa.ucsf.edu. After June 1, 1996 send to: **Phil Wedegaertner**, **Ph.D.**, **Department of Pharmacology, Kimmel Cancer Institute, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107.** *We are an Equal Opportunity Employer***.** 

POSTDOCTORAL POSITION, Epilepsy Research Laboratory, UCSF. NIH-funded position available immediately for studies on the molecular basis of axonal reorganization in the hippocampus. Expertise in molecular biology required; background in cell culture desirable. Please send curriculum vitae and three references to: D. H. Lowenstein, Department of Neurology, Box 0114, UCSF, San Francisco, CA 94143. FAX: 415-476-5229; Email: dhl@itsa.ucsf.edu. Affinnative Action/ Equal Opportunity Employer.

#### COURSES AND TRAINING

#### CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND SCIENTISTS

A one-weck intensive course sponsored by the Massachusetts Institute of Technology, July 22 to 26, 1996, Cambridge, Massachusetts. **Dr. Richard J. Cohen**, Program Director. Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: **Director of the MIT Summer Session, Telephone: 617-253-2101**.

#### COURSES AND TRAINING

#### MEDICAL SCHOOLS IN AUSTRALIA

Three of Australia's leading medical schools (Flinders University of South Australia, the University of Queensland, and the University of Sydney) are now offering four-year graduate entry medical degrees, with places reserved for international students. Experience has shown that Australian graduates of these medical schools perform well in USMLE examinations. Student loan funds are available from the U.S. Government.

Prerequisites include a Bachelor's degree and good performance in the Graduate Australian Medical Schools Admission Test (GAMSAT) or MCAT. The courses feature problem-based learning, small classes, early patient contact, and research opportunities.

For admission in February 1997, applications close with the Australian Council for Educational Research (ACER) on 30 June 1996. Detailed admission information and application forms available from: ACER, FAX: +61 3-9227 5757; Telephone: +61 3-9277 5710; Email: aldous@acer.edu.au.

#### ANNOUNCEMENT

**PRE-PROPOSALS**—Deadline: 1 July 1996. International Foundation for Ethical Research (IFER) has grants available for research into alternatives to the use of live animals in research, testing, and education. Projects must take into account the three R's: Refinement, Reduction, and Replacement, plus a fourth R: Responsibility. For information and format write: IFER, 53 West Jackson Boulevard, Department J, Chicago, IL 60604. Telephone: 312-427-6025.







#### MARKETPLACE NEW NO ANALYZER Chemiluminescence **Model 280** Exhaled Breath • Cell Culture • Plasma Phone (303) 444-2009 Fax (303) 444-9543 USA SIEVERS Circle No. 36 on Readers' Service Card Thermostable FN **/** \ \ Reduce the sequencing cost to 25¢/Rxn Also minimize the number of N Scientech corp. T: 1+800+645+0089 F: 314+645+0177 Circle No. 19 on Readers' Service Card DNA SYNTHESIS \* \$1.00 per base for 10 OD DNA SEQUENCING \* As low a ¢50 per base Retrogen Circle No. 12 on Readers' Service Card **89**¢ Quantity 15 Deprotected <sup>\$</sup>15 and Desalted to 40 ma per residue per base 5-10 OD No Set-up Charge. Quality Guaranteed. GENEMED BIOTECHNOLOGIES (800) 344-5337 • Fax (415) 952-9540 Circle No. 18 on Readers' Service Card COMPREHENSIVE BIOTECH SERVICES Your one stop biotech shop! Automated DNA sequencing Custom DNA/RNA synthesis, Protein/peptide sequencing Protein/peptide synthesis • MALDI-TOF, ES/MS Commonwealth Biotechnologies, Inc. Phone: 1-800-RELY-CBI 1-800-735-9224 FAX : 804-648-2641 E-MAIL: CBI@richnet.com

Circle No. 1 on Readers' Service Card

Marketplace ads continue on page 778



# IT MAY BE 1996 BUT..... 2001 IS ALREADY HERE Electro Cell Fusion & Electroporation In One Instrument!



# **Applications:**

- Hybridoma & Quadroma Formation to Produce Bispecific Antibodies'
- **Fusion of Plant Protoplasts**<sup>2</sup>
- Animal Embryo Manipulation<sup>3</sup>
- Electroporation of Plant, Mammalian, Bacteria, Yeast and Fungi

Monitor experiments with the Optimizor\*



Optional with other systems

#### Print results immediately



Printer and remote control included with all ECM<sup>®</sup> 2001 Systems

# 

- Electrofuse hybridomas to produce bispecific antibodies simpler, faster, and more economically.
- Produce quadromas in as little as 2 to 4 weeks!
- **Does not require drug selection markers.**
- Non-invasive, non-toxic, non-chemical procedure.
- ▶ Improves yields and hybridoma recovery by as much as 100-fold<sup>1</sup>.

<sup>1</sup>JOURNAL OF IMMUNOLOGICAL METHODS, vol. 187: 1-7, (1995). "A Rapid Non-Selective Method to Generate Quadromas by Microelectrofusion"; Y. Cao, T. Vinayagamoorthy, A.A. Noujaim, M.R. Suresh.

<sup>2</sup>MOLECULAR BIOTECHNOLOGY, vol. 3: 181-189 (1995). "Rapid Optimization of Electroporation Conditions for Plant Cells, Protoplasts, and Pollen"; Saunders J.A. et al

<sup>3</sup>ANALYTICAL BIOCHEMISTRY, vol. 208: 1-9 (1993). "Preparation of Nuclear Transplant Embryos by Electroporation"; Robl, J.M. et al.



Distributed In The U.S.A. By: VWR Scientific: 1-800-932-5000 Intermountain Scientific: 1-800-999-2901

Internationally Distributed In: AUSTRALIA: Tel. 02/9975-7582 AUSTRIA: Tel. 49/6221-83-10-23 BELGIUM, LUXEMBOURG, NETHERLANDS: Tel. 0800/19815 BRAZIL: Tel. 21/592-6642 CANADA: Tel. 800/932-5000 CHINA: Tel. 10/831-3388 DENMARK: Tel. 86/10-10-55 EGYPT: Tel. 02/384-0526 FINLAND: Tel. 0/584121 FRANCE: Tel. 1/49-42-20-30 GERMANY: Tel. 0622/183-10-23 GREECE: Tel. 01/522-6547 HONG KONG: Tel. 2578-5839 INDIA: Tel. 0/584121 FRANCE: Tel. 1/49-42-20-30 GERMANY: Tel. 0622/183-10-23 GREECE: Tel. 01/522-6547 HONG KONG: Tel. 2578-5839 INDIA: Tel. 0/584127 KOREA: Tel. 02/538-4441 MALAYSIA: Tel. 0622/183-10-23 GREECE: Tel. 01/522-6547 HONG KONG: Tel. 03/352-2371 or 06/674-2222 KOREA: Tel. 02/538-4441 MALAYSIA: Tel. 03/703-1888 MEXICO: Tel. 5/341-7764 NEW ZEALAND: Tel. 03/355-7699 NORWAY: Tel. 22-71-50-90 POLAND: Tel. 71/735-813 PORTUGAL, SPAIN: Tel. 03/01/530-0379 SOUTH AFRICA: Tel. 1/789-3392 SWEDEN: Tel. 43-51-30-60 SWITZERLAND: Tel. 06/1/712-16-16 TAIWAN: Tel. 02/880-2913 THAILAND: Tel. 02/308-0611 UNITED KINGDOW: Tel. 1670/73-29-92

Circle No. 49 on Readers' Service Card



THE ELECTROPORATION EXPERTS 11199-A Sorrento Valley Road San Diego, CA 92121-1334 U.S.A. (619)597-6006 • Fax: (619)597-9594

BTX is a division of Genetronics, Inc.

http://www.genetronics.com

# **Accelerate Your Human Positional Cloning Project Using Radiation Hybrid Mapping**



Three Radiation Hybrid Mapping Panels provide the power and flexibility to not only map your sequence or genetic marker to a small region of a chromosome, but to help identify YAC clones containing and/or adjacent to your sequence. In addition, you can determine the order of PCR based markers and STSs in the region as well as estimate the distance between them. Finally, you can identify known genes or any I.M.A.G.E. Consortium cDNA clones that have been mapped to your region of interest.

The Stanford G3 RH Panel is a medium resolution, 10,000 rad panel consisting of 83 clones and two controls. An e-mail server, operated by the Stanford Human Genome Center, will attempt to link your marker to framework markers they have already assayed, which includes 973 markers from the Genethon linkage map. ESTs are also being placed in relation to these markers. Current details may be obtained from http://shgc.stanford.edu

The GENEBRIDGE 4 Panel is a lower resolution, 3,000 rad panel consisting of 93 clones and two controls. An experimental e-mail server, operated by the Whitehead Institute/MIT Center for Genome Research will attempt to link you marker to their recently released Whitehead RH framework map containing 1339 markers. Linkage to this map will often identify putative YAC clones containing and/or surrounding your marker as well as position your marker relative to thousands of ESTs and other PCR based markers. Current details may be obtained from http://wwwgenome.wi.mit.edu

The Stanford TNG Panel is a high resolution 50,000 rad panel consisting of 86 clones and two controls. This newly developed panel will be used to produce extremely high resolution RH maps. Currently, you may use this panel to determine the order of

Catalog No. RH01.02 RH01.05 RH02.02 RH02.05 RH03.02 RH03.05

Description Stanford G3 Stanford G3 GENEBRIDGE 4 **GENEBRIDGE 4** Stanford TNG Stanford TNG

**Ouantity** 2µg of each clone 5µg of each clone 2µg of each clone 5µg of each clone 2µg of each clone 5µg of each clone

Price \$450.00 \$800.00 \$450.00 \$800.00 \$450.00 \$800.00



**Research Genetics**, Inc. 2130 Memorial Pkwy, SW • Huntsville, AL • 35801 U.S. or Canada 800-533-436 Worldwide 205-533-4363 U.K. 0-800-89-1393 FAX 205-536-9016 Homepage http://www.resgen.com

Circle No. 61 on Readers' Service Card