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Panel B: Large fragment DD-PCR samples run on genomyxLR DNA Sequencer (18 hr, 100 W, 703 V, 40°C, 6% HR-1000 denaturing gel). Lanes represent total RNA prepared from untreated and treated human cell line cultures. DD-PCR carried out with GenHunter RNAimage™ Kit. Data provided by Dr. Karen Lowe (Genomyx Corporation).

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AND TECHNOLOGY OLICY YEARBOOK

Albert H. Teich, Stephen D. Nelson and Celia McEnaney, editors

The past year has been filled with dramatic developments in science and technology policy following the election in November 1994. Budget cuts, large-scale reorganizations, laboratory closings, and ventures into international cooperation have all been on the table in the most uncertain policy environment in decades. Like the preceding volumes in this annual series, the 1995 YEARBOOK brings together in a single volume the key science and technology policy documents of this remarkable year. Included are papers from the 1995 AAAS S&T Policy Colloquium as well as a variety of other influential documents.

1995; 368 pages; \$24.95 (AAAS member price \$19.96) Purchase the 1994 Yearbook for \$12.50 (half price) and the 1991-1993 Yearbooks for only \$5.00 each. Postage/handling per order \$4.00. AAAS Distribution Center, PO Box 521, Annapolis Junction, MD 20701. Order by phone (VISA/MasterCard only) call 1-800-222-7809. Fax orders to 301-206-9789.

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A new way named Macintosh."

Sure, personal computers had been around for a while. But never before had one computer so completely, so instantly, changed the landscape of the possible.

### Making the extraordinary ordinary.

In the 12 years since, Apple<sup>®</sup> innovations have continued to redefine what people can do with a personal computer. They've also found their way into some of our competitors' PCs and operating systems. For example, the plug-and-play technology we brought to market in 1987 is just now becoming a reality for other PC makers. Macintosh was one of the first

affordable desktop computers to employ powerful RISCbased microprocessors. (We're now working on the fourth-generation PowerPC<sup>™</sup> RISC chip.) And we're still the only company in the world making a computer that runs both the Mac<sup>™</sup> OS and Windows.\*

As a result of these Apple innovations, ordinary people can sit down at all kinds of PCs and actually get some work done. Of course, if they sit down at a

More than a few of the things that seen standard on a personal computer today were pioneered by Apple.

05

Macintosh, they can build 3-D graphics. Use virtual reality in very real ways. Videoconference across continents. Collaborate with colleagues on the far side of the corporate campus. Build interactive sites on the World Wide Web. And more. That's the Mac advantage.

### People do know the difference.

Today, 56 million people do their work the Macintosh way. Some in school. Some at home. And, when you look at the numbers from recent studies, guite a few in business. We command a 47% share of the U.S. commercial publishing market. And 76.2% of the color pre-press market. And though our dominance in graphics-related businesses may not

shock you, consider this: we have a 50% share of the chemical, pharmaceutical, biotechnology, scientific and engineering computing markets.

And then, there's the fact that Macintosh brand loyalty is the highest of any PC in the world: 90% of Macintosh customers buy a Mac the next time around. Which leads people like Andrew Laham, MIS Director at the law firm Fleming, Hovenkamp & Grayson, to say, "There would be a major crisis if we had to do without Macs. In fact, there would be an open revolt." Indeed, if the mail we've received lately is any indication, more than a few CFOs out there would revolt, too, if their companies didn't use Macintosh computers.

"NASA saved \$800,000 a year on maintenance alone when we replaced their legacy system with a Macintosh system," says Steve Monteith, a member of the Research Triangle Institute Tech Tracs Team.

And if you replace a Windows system with a Mac? According to a recent study by the Gartner Group, technical support costs for Macintosh tend to be 25% lower than support costs for Windows.\*\* Even PC World magazine ranked Apple as one of the best for reliability and service among all makers of personal computers.

### See the future. Turn on a Mac.

As they say, you can't simply rest on your laurels. So what's next? Let's start with Copland, our upcoming operating system. Copland won't just change the look of the Macintosh desktop; it will incorporate an entirely new technology called OpenDoc° that will change the way you think about computers. (Sound like hype? Check out *InfoWorld*—they named OpenDoc the winner of the 1995 Landmark Technology Award.)

And then there are the 53 new software patents we were awarded in 1995, patents on everything from wireless communication, power management and manufacturing systems to data encoding, data compression and encryption. That's more than enough innovation to bring another generation, or three, of intelligent business tools to market.

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## PRODUCTS & MATERIALS

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### MicroAmp Reaction Tubes and Caps

Several new products have been added to the line of MicroAmp polymerase chain reaction (PCR) disposables—MicroAmp Colored Reaction Tubes with and without caps, MicroAmp 8-Strip Reaction Tubes (clear or colored), and MicroAmp Colored Caps in 8or 12-strip packaging. These new 0.2-ml tubes and caps, designed for the GeneAmp PCR System 9600 and GeneAmp PCR System 2400, provide optimum temperature accuracy for fast, oil-free PCR amplification. **Perkin-Elmer. Circle 137.** 

### **Personal Imaging Workstation**

The GDS 8000 Personal Imaging Workstation combines equipment and software to allow researchers to view, document, and analyze gels, films, and membranes. Once an image is visualized by the camera, it can be "grabbed" by the software, then enhanced, zoomed, annotated, and saved as a TIFF file for exporting or archiving. The software allows for detailed analysis, providing a sophisticated range of features including band matching, quantity and intensity calibration, comparison data, and dendograms. **UVP. Circle 138.** 

### **Thermostable DNA Polymerase**

Thermalase Tbr Thermostable DNA Polymerase is isolated from a proprietary strain of *Thermus brokianus*. Thermalase Tbr offers advantages over Taq polymerase in primer extension reactions. Thermalase Tbr has fidelity two times that of Taq polymerase. At 96°C, Thermalase has a half-life of nearly 2.5 hours, double that of Taq polymerase, allowing the use of less enzyme and longer reaction times. It can be used to extend primers up to 6000 bp. Amresco. Circle 139.

### Mini Vertical Gel System

The EC120 Mini-Vertical Gel System is designed to simplify mini-gel electrophoresis. The manufacturer's unique, leak-free casting system eliminates cumbersome assembly with self-adhering, no-slip spacers that hold plates together. The EC120 accepts a variety of commercially available precast gels. The flexible chamber maximizes throughput and savings by running up to four 8 cm by 7 cm gels at once. Two simple clamps correctly tension the gel plates without the use of screws. Both a two-gel and a four-gel system are available. **E-C Apparatus Corp. Circle 140.** 

### Genomic DNA

Genomic DNA preparations from several microbial strains and cell lines are available. Researchers can obtain genomic DNA from 11 yeast strains (25- $\mu$ g aliquots), plasmid DNA from 10 molecularly cloned viruses (2- $\mu$ g aliquots), and genomic DNA from four human tumor cell lines and from two sets of paired human normal/tumor cells. Each pair of human cell lines was derived from the same individual, permitting a comparison of normal and tumor cells. American Type Culture Collection. Circle 141.

### DNA from Paraffin-Embedded Tissues

The DNA Isolator PS Kit is for precipitation of DNA from formalin-fixed and paraffinfixed tissue sections for sequential highamplification polymerase chain reaction (PCR). A simple series of reagent addition and centrifugation steps eliminates laborious deparaffinization and subsequent deproteinization efforts. There is little risk of crosscontamination in the single-tube procedure. Other advantages include reduced preparation time and elimination of exposure to hazardous substances. Applications include the analysis of DNA in archived sections, analysis of biopsy and autopsy samples by PCR, and chronological studies of diseases and their genetic and infectious links. Wako BioProducts. Circle 142.

### 1

### **Radiation Shield Pipettor Stand**

The acrylic NALGENE Pipet Rack and Stand is for convenient, safe handling of pipettors used with radioisotopes. It keeps pipettors within reach and safely behind a protective shield.



Designed for use in research facilities and labs using beta radiation, each rack holds up to four standard size pipettors, keeping them off potentially contaminated work surfaces. Nalge Nunc International. Circle 143.

### Premixed Acrylamide Solutions

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SCIENCE • VOL. 272 • 5 APRIL 1996

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.

concentrations as well as 75-ml dispenser bottles of 6 and 8%. Integrated Separation Systems. Circle 144.

### -

### Antibodies

Several highly specialized antibodies for intracellular and extracellular markers are available, including monoclonal antibodies that recognize specific organelle proteins such as mannosidase II and nuclear pore complex proteins. These antibodies can be used to study the roles of proteins in the Golgi apparatus and nuclear envelope. A polyclonal antibody specific for involucrin can be used to study terminal differentiation in the upper layers of the epidermis. These antibodies can all be used in immunofluorescence studies and have very high titers. **Berkeley Antibody Co. (BAbCO). Circle 145.** 

### **Chromatography Medium**

HyperDiffusion\* chromatography medium offers a new approach to peptide and protein 10 purification. The medium combines the high flow of a rigid, open, porous structure with the high binding capacity of a soft gel. It delivers capacities ranging from low (30 cm/hour) to very high (>1000 cm/hour) linear velocities. Based on a rigid composite matrix with hydrogen-filled pores, the medium



offers rapid separations and diffusion rates that are largely independent of linear velocity. **Beckman Instruments. Circle 146.** 

### Literature

Fluorescence Imaging Applications Guide contains information and protocols for doing the most common nucleic acid and protein applications using fluorescence instead of radioactivity. The guide presents 10 applications covering specific and nonspecific DNA and protein detection assays in gels, blots, and microplates. Information on detection limits and the linear quantitative ranges for each protocol is listed, along with vendor information and handling and storage requirements for specified reagents. **Molecular Dynamics. Circle 147.** 

Apoptosis: A Complete Catalog and Scientific Reference Guide describes more than 300 antibodies, assays, peptides, proteins, and probes for the study of apoptosis. Products include regulators of apoptosis, p53 and related products, cell cycle and proliferation markers, and specific inducers and inhibitors of apoptosis. Calbiochem. Circle 148.

Qiagen Product Guide 1996 describes products in the following categories: plasmid DNA isolation, phage DNA isolation, DNA clean-up and gel extraction, genomic DNA and viral nucleic acid isolation, RNA isolation, automated nucleic acid preparation, protein purification and expression, and nucleic acid blotting. Qiagen. Circle 149.

Instruments and Media for Chromatography is an 88-page catalog covering low-pressure liquid chromatography, high-performance liquid chromatography (HPLC), microbore HPLC, and supercritical fluid chromatography. New products include spherical cellulose media for ion exchange, affinity, and gel filtration separations. **Isco. Circle 150.** 



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### POSITIONS OPEN

### FROSTBURG STATE UNIVERSITY FOREST ECOLOGY

Frostburg State University (FSU) seeks a full-time ten-ure-track ASSISTANT or ASSOCIATE PROFESSOR in Forest Ecology to begin in August 1996, pending budget approval. Salary commensurate with experience. Responsibilities: Establish an active research program; teach courses in forest science and plant community analysis; contribute to general biology program; direct under-graduate and graduate research; collaborate with faculty on conservation biology and natural resource manage-ment projects. Possibility of half-time release from teaching responsibilities to enhance research program in envi-ronmental sciences. Minimum requirements: Ph.D. in forestry or related field and a strong background in forestry, botany, and statistics; demonstrated excellence or potential for excellence in teaching and research. Pre-ferred qualifications: College-level teaching. The Biology Department offers undergraduate degrees in biology and wildlife/fisheries; graduate degrees in wildlife/fisheries biology and applied ecology and conservation biology. Direct position inquiries to: Dr. David Morton, Tele-phone: 301-687-4355/4166, and employment inquir-ies to: Human Resources, Telephone: 301-687-4105 (Voice/TDD). Send letter of interest; curriculum vitae; copy of transcripts; and names, addresses, and telephone numbers of three professional references to: Frostburg State University, Office of Human Resources, Atten tion: Forest Ecology (Position 96-516-Science), Frostburg, MD 21532. Application review to begin

May 1, 1996; applications received until position filled. FSU is an Affirmative Action/Equal Opportunity Employer. Appropriate auxiliary aids and services for qualified individuals with disabilities will be provided upon request. Please notify in advance.

#### FACULTY POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine at Hershey, invites applications for tenure-track faculty positions from outstanding candidates who are working in areas related to defining the molecular basis of the disease process. We are seeking individuals who are using molecular and cellular approaches to better understand the im-mune response; molecular virologists/biologists working with HIV or other retroviruses, DNA or RNA viruses; as well as individuals studying the molecular basis of onco-genesis. Candidates at the ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR levels will be consid-ered. All applicants must have a Ph.D. and/or M.D. de-gree, postdoctoral research experience, and a strong record of research accomplishments. Successful applicants are expected to establish an extramurally funded research program. Excellent research facilities, strong departmental and interdepartmental graduate student training pro-grams, and macromolecular synthesis and sequencing core facilities all contribute to the productive research environment within the Department. Participation in the Department's graduate and medical student teaching programs is expected. Applicants should send their curriculum vitae, a statement of research interests, and the names of three references to: Dr. Richard J. Courtney, Chair, Department of Microbiology and Immunolo gy, Penn State University College of Medicine, De-partment 20, 500 University Drive, Hershey, PA 17033. For your health, Hershey Medical Center is a smoke-free campus. We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.

The Department of Medicine, Division of Infectious Diseases, State University of New York (SUNY) at Stony Brook, is seeking two full-time faculty members for appointment to positions at the ASSISTANT, ASSOCI-ATE, or PROFESSOR of Medicine levels. M.D. or Ph.D. required. M.D. must be Board Certified in Internal Medicine, certified or eligible in Infectious Diseases. Must have strong interest in basic research of microbial host interactions. Must have high likelihood of attracting external funding. Expertise in molecular and viral mechanisms of pathogenesis. Applications will be accepted until the position is filled. Please address inquiries with copy of curriculum vitae to: Benjamin J. Luft, M.D., Acting Chairman, Department of Medicine, HSC-T-16, Room 020, Stony Brook, NY 11794-8160.

SUNY Stony Brook is an Affirmative Action/Equal Opportunity Employer and Educator.

### POSITIONS OPEN

#### ASSISTANT PROFESSOR Department of Biochemistry Emory University School of Medicine

We seek to fill two tenure-track positions at the **ASSIST**-**ANT PROFESSOR** level. The successful candidates will be expected to establish a vigorous, well-funded research rogram of national merit and to participate in interdisciplinary graduate training, medical, and postgraduate training. These positions will offer competitive salaries and start-up funding. The area of expertise is open, but the candidates should show a strong foundation in the physical/chemical sciences and should be investigating modern problems that would enhance and complement existing research programs. Current areas of strength in the Department include signal transduction, lipids and biomembranes, DNA repair, transcriptional control, oxidative metabolism, protein turnover, physical biochemis-try, and human genetics. Emory University is a private institution located in suburban Atlanta with a modern college campus contiguous to the Medical Center, a hospital system serving a population base of over 3 million, an outstanding faculty, a highly competitive student body, and a generous endowment. The biomedical research programs occupy over 500,000 square feet of new or renovated research space and garner in excess of \$100 million per year in peer-reviewed research support. Appli-cations will be accepted until the positions are filled. More information can be obtained at our Web page, http:// www.biochem.emory.edu. Direct inquiries to: Dr. Keith D. Wilkinson, Search Committee, Department of Biochemistry, Emory University, Atlanta, GA 30322. Emory University is an Equal Opportunity/Affirmative Action Employer.

### DEPARTMENT OF ANATOMY AND CELL BIOLOGY

The Department of Anatomy and Cell Biology, College of Medicine, University of Saskatchewan, invites applications for a tenure-track faculty appointment at the rank of **ASSISTANT PROFESSOR**, effective July 1, 1997. Areas of research in the Department include cell, molecular, and developmental biology; kinesiology, morphometrics; and neurobiology. Applicants must have postdoctoral training and a strong research program in one of these areas. The appointee will be expected to teach histology and

The appointee will be expected to teach histology and should have an ability to teach in one or more other areas of the anatomical sciences (cell biology, neurobiology/ neuroanatomy, developmental biology). The successful candidate will instruct medical and other undergraduate life science students and contribute to graduate courses and training in his or her area of research specialty. An application, curriculum vitae, names of three refer-

An application, curriculum vitae, names of three referees, and statement of previous teaching experience and research interests should be submitted by May 15, 1996 to: Dr. G. D. Burkholder, Department of Anatomy and Cell Biology, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan S7N 5E5 Canada. The University of Saskatchewan is committed to the principles of Employment Equity. Women, people of aborginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their applications. This position has been cleared for advertising at the two-tier level. Applications are invited from qualified individuals regardless of their immigration status in Canada.

#### HARVARD UNIVERSITY Appointment in Earth Science

The Department of Earth and Planetary Sciences, Harvard University, plans to make two appointments in areas dealing broadly with paleoclimate and surficial or nearsurface processes.

The appointments will ordinarily be made at the junior level, although in exceptional circumstances a senior appointment may be considered.

In addition to carrying out an active research program, the successful candidate will be expected to teach at both the undergraduate and graduate level. The appointments are expected to start in the spring or fall of 1997.

Applicants should send curriculum vitae, descriptions of research and teaching interests, and names of three references to: Geology Search Committee, Department of Earth and Planetary Sciences, Harvard University, 20 Oxford Street, Cambridge, MA 02138. Applications are due by 1 May 1996. Harvard University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### POSITIONS OPEN

The Neuroscience Research Institute (NRI) and the Children's Hospital of Eastern Ontario (CHEO), University of Ottawa, seek applications from basic neuroscience researchers for a **TENURE-TRACK-EQUIVA-LENT** appointment. The successful applicant will possess a strong background in molecular neurosciences. He or she will have demonstrated an independent research program applied to clinically relevant research areas broadly relating to stroke, neurodegenerative diseases, or mental illnesses. Areas of particular research interest would include: neurotrophins and neuronal survival, receptor-mediated signal transduction mechanisms, regulation of apoptosis/proliferation and cell migration/differentiation in brain, transgenic approaches to understanding brain function, and regulation of gene transcription in the brain.

A generous start-up package will be made available to the successful applicant. The NRI is a recently established institute focusing on developing innovative approaches to address aspects of neuronal function. It is located on a thriving campus that includes basic medical science departments, the CHEO Research Institute, the newly established Ottawa General Hospital Research Institute, the Cancer Research Centre, and two tertiary care hospitals. Please send curriculum vitae and a description of cur-

rent and future research plans to: Dr. A. M. Hakim Director, Neuroscience Research Institute 451 Smyth Road Ottawa, Ontario K1H 8M5 Canada

According to Canadian Immigration requirements, this ad is primarily addressed to Canadian citizens and landed residents of Canada.

#### ASSISTANT PROFESSOR PLANT PATHOLOGY

Penn State University invites applications for a 48-week, **TENURE-TRACK**, 80% research and 20% teach-ing position available July 1, 1996. The research responsibility is to develop a program in molecular genetics of fungal plant pathogens. Potential areas include host pathogen interactions and related aspects of plant disease research. Teaching responsibilities include a course in fungal or plant disease molecular genetics and directing graduate students. A Ph.D. from a discipline relevant to molecular genetics of fungi and plant disease and demonstrated research experience in fungal molecular genetics is required. Postdoctoral experience in molecular genetics of fungi and plant disease and demonstrated publication record and teaching experience are desirable. Salary is competititve. Applicants should submit a letter of application, curriculum vitae, academic transcripts, a written statement on research interests and teaching and professional philosophies, and three letters of recommendation to: Dr. John E. Ayers, Search Committee Chair, De partment of Plant Pathology, 308 Buckhout Laboratory, Box S-104, University Park, PA 16802-4507. Application Deadline: April 30, 1996 or until filled. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

#### **OCEANOGRAPHER**

Nova Southeastern University Oceanographic Center invites applications for a full-time FACULTY position (Assistant or Associate Professor) in either of two formats: 100% undergraduate teaching (eight classes) for 9.5 months, or 50% teaching (four classes) plus 50% research for 12 months in areas of oceanography or marine biological sciences. Teaching may include courses in Environmental Science, Research Methods, Introduction to Oceanography, History of Science, and Ecology. The suc-cessful applicant for the 12-month position will be expected to develop an externally funded research program. As much as two months' salary may be provided by the University for faculty carrying out 50% research. Applicants with established programs will be considered favorably. Teaching opportunities are also possible at the graduate level. Applicants should submit a copy of transcript(s), curriculum vitae, statement of research and teaching interests, and the names and addresses of three professional references to the attention of: Dr. Charles Messing, Chairman of Search Committee, c/o Department of Human Resources (MMB), Nova Southeastern University, 3301 College Avenue, Fort Lau-derdale, FL 33314. Applications will be read on or before April 30, 1996. Affirmative Action/Equal Opportunity Employer/Smoke-free campus

### POSITIONS OPEN

#### ASSISTANT OR ASSOCIATE PROFESSOR MR Physics

A tenure-track or tenured position of medical physicist in the Department of Radiology at the University of Minnesota will be offered at the ASSISTANT or ASSOCI-ATE PROFESSOR level. The individual will conduct MR research in neuroradiology and MR at 1.5 Tesla on echoplanar-capable Philips and Siemens MR scanners. Minimum requirements at the Assistant Professor level are a Ph.D. in physics or chemistry, a strong background in mathematics, and at least two years of experience in techniques of MR imaging, MR spectroscopy, and MR angiography with a suitable publication record in peerreviewed journals. Appointment at the rank of Associate Professor requires a minimum of five years of research experience in the same research areas and an extensive publication record. In addition, the successful candidate must be able to demonstrate expertise and publications in endovascular and cardiovascular interventional MR techniques, experience with interventional MR equipment, with special experience in RF coil design. The candidate should also have familiarity with Philips MR scanners and programming language, MR-compatible materials, and contrast agents. Salary is negotiable and competitive. Applications will be accepted through May 15, 1996. Send letters to: Dr. E. Russell Ritenour, Director, Physics Section, Department of Radiology (Box 292 UMHC), 420 Delaware Street S.E., Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Employer/ Educator, and specifically invites and encourages applications from women and minorities.

#### FACULTY POSITIONS IN X-RAY CRYSTALLOGRAPHY OF BIOLOGICAL MACROMOLECULES Emory University School of Medicine Department of Biochemistry

Applications are invited for senior and junior-level **FACULTY POSITIONS** in X-ray crystallography in the Department of Biochemistry, including an endowed professorship as the Georgia Research Alliance Eminent Scholar in X-ray Crystallography of Biological Macromolecules. The faculty will establish a state-of-the-art X-ray diffraction facility in new research space as part of campus-wide expansion of structural biology. Emory University is a private institution located in suburban Atlanta with an attractive campus comprising the Woodruff Health Sciences Center, Emory College, the law school, and other academic units. The biomedical research space and garner more than \$100 million per year in peer-reviewed research support. Send a letter briefly describing research program, a curriculum vitae, and the names of three references by May 31, 1996 to: Dr. Alfred Merrill, Department of Biochemistry, Emory University Medical School, Atlanta, GA 30322. Telephone: 404-727-5978; FAX: 404-727-3954; Email: amerril@emory.edu. More information can be obtained at our Web page, http://www.biochem.emory.edu. Emory University is an Equal Opportunity/Affinatire Action Employer.

The George Washington University Medical Center (GWUMC) is seeking a **PROFESSOR AND CHAIR** for the Department of Microbiology and Immunology. The GWUMC seeks a distinguished Ph.D. or M.D./ Ph.D. scientist with an outstanding record of scientific productivity and proven ability to attract external funding in microbiology, molecular virology with an emphasis on AIDS or cancer. The Chair will direct the expansion and integration of a program in molecular virology, microbiology, and immunology. The Chair will serve as director of an interdisciplinary Research Center and actively recruit additional faculty members. The candidate should be capable of leading the Department to a position of academic excellence and national prominence. The successful candidate will have demonstrated excellence in teaching at the medical, graduate, and postdoctoral levels, as well as leadership qualities and administrative skills necessary to develop an academic interdisciplinary program. Applications will be accepted and reviewed on an ongoing basis until the position is filled.

Applicants should submit curriculum vitae, an outline of current and future research interests, and names of three references to: Bunny Wing-Fernhall, The George Washington University Medical Center, Department of Microbiology and Immunology, 2300 Eye Street, N.W., Washington, DC 20037. The GWU is an Equal Opportunity/Affinative Action Employer. Applications from uronen and minorities are encouraged.

### POSITIONS OPEN

#### CSU MONTEREY BAY TENURE-TRACK FACULTY POSITION Institute for Earth Systems Science and Policy Ecological Economics—Job EE9601

California State University (CSU) Monterey Bay seeks a tenure-track individual with transdisciplinary skills in ecological economics to fill a position in the Institute for Earth Systems Science and Policy (ESSP). The ESSP program emphasizes a rigorous systems approach that links the sciences to one another and to the economic and political components of the earth system. The successful candidate will be responsible for incorporating economics and policy into the ESSP curriculum and research programs. Candidates must demonstrate achievement in teaching, research, technological expertise, and a record of recruiting and advising multicultural populations. The successful candidate will teach introductory and advanced courses, conduct research, and develop innovative curriculum and assessment procedures. A Ph.D. in economics, ecology, or related field required. Rank is at ASSIST-ANT or ASSOCIATE PROFESSOR level. Start date: August 26, 1996. Refer to our World Wide Web Home Page (http://www.monterey.edu) or Telephone: 408-582-3364 for complete announcement. Apply to: Ms. Rose Pasibe, Office of Faculty Recruitment, CSU Monterey Bay, 100 Campus Center, Seaside, CA 93955-8001. CRS(TDD users): 1-800-735-2929; Email: faculty\_recruitment@monterey.edu (applications-we are an MS Word Macintosh campus); faculty\_recruitment\_II@monterey.edu (inquiries). Po-sition closing date: May 6, 1996. Open until filled. *Califor-*nia State University is an Equal Opportunity/Affirmative Action and ADA Employer committed to excellence through diversity.

#### ASSOCIATE DIRECTOR OF RESEARCH GERIATRIC RESEARCH, EDUCATION AND CLINICAL CENTER Veterans Affairs Medical Center Minneapolis, Minnesota

Applications are invited for a SENIOR STAFF position in the Geriatric Research, Education and Clinical Center (GRECC) of the Department of Veterans Affairs Medical Center in Minneapolis, Minnesota. This individual is expected to take a leadership role in research related to the aging nervous system. The successful candidate will be one who demonstrates appropriate leadership skills, including the ability to maintain effective interactions over a range of basic science and clinical disciplines related to brain and aging. Candidates should have a record of outstanding research accomplishments as evidenced by national and international recognition, appropriate funding record, and proven ability to train graduate and postdoctoral researchers. The position includes a permanent staff appointment in the federal government and an academic appointment in an appropriate Department in the University of Minnesota at a level commensurate with the credentials of the successful candidate. In addition to research, participation in teaching and clinical activities are negotiable.

Candidates holding the M.D. and/or Ph.D. degree are invited to apply by sending a letter of interest, curriculum vitae, and three names of persons for references prior to June 30, 1996 to: Dr. Apostolos P. Georgopoulos, Chair, GRECC Search Committee, Brain Sciences Center, VAMC (11B), One Veterans Drive, Minneapolis, MN 55417. The Minneapolis Veterans Affairs Medical Center is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

### SENIOR LEVEL POSITION

The Department of Mathematics at Yale University invites applications for a position of **FULL PROFESSOR**. The department is most interested in applicants whose areas of interest include computational and applied mathematics, numerical methods for partial differential equations, computational physics, and related fields. The candidate should expect to assume a role of leadership in developing and directing a program of applied mathematics at Yale.

A candidate for this position must have established an exceptional record in formulation, analysis, and implementation of numerical algorithms, as well as a record of scientific leadership in at least one of the areas listed above. In addition to strong commitment to research, a candidate should have a demonstrated record of teaching on undergraduate and graduate levels, and a desire to direct Ph.D. theses.

Applicants should send a statement of interest in the position and a curriculum vitae to: **Professor H. Garland, Department of Mathematics, 10 Hillhouse Avenue, P.O. Box 208283, New Haven, CT 06520-8283.** *Yale University is an Affirmative Action/Equal Opportunity Employer.* 

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

The National Institute of Nursing Research (NINR) is seeking applicants for the position of Scientific Director, National Institute of Nursing Research. The incumbent will direct a multi-disciplinary laboratory and clinical research program, advising the Director, NINR, on all ongoing and projected intramural research programs. The Scientific Director participates actively in the planning of the Institute's nursing research initiatives and resource allocation and management. Responsibilities include assessing program effectiveness, and initiating or redirecting programs of basic and clinical research to achieve the goals of the NINR.

Applicants must have a Ph.D. in one of the health sciences, and M.D. or an equivalent combination of experience and training. The successful candidate must have a strong background in basic and/or clinical research and possess demonstrated competence in assuming leadership needed to achieve key national and organizational goals related to nursing science.

This position is located in Bethesda, Maryland, and is a permanent full-time Senior Executive Service (SES) or GS-15 position with a salary range of \$94,800 to \$115,700 (SES) or \$69,300 to \$90,090 (GS-15) (plus 6.04% locality pay) per annum commensurate with qualifications. Physicians may be eligible for an annual comparability allowance ranging from \$5,000 to \$20,000 per year. Candidate may be eligible for membership in the Senior Biomedical Research Service.

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

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

A one-year probationary period may be required depending on prior government service.

All candidates must be U.S. citizens and must submit an Application for Federal Employment and/or curriculum vitae **no later than June 3**, **1996.** For qualification and application information contact:

CHERRY L. EARL NATIONAL INSTITUTE OF NURSING RESEARCH PERSONNEL OFFICE, BUILDING 31, ROOM 5B25 31 CENTER DRIVE MSC 2178 BETHESDA, MD 20892-2178 (PHONE: 301-402-2631)

NIH is an Equal Opportunity Employer

### Virologist



**GLADSTONE INSTIT** 

**GLADSTONE INSTITUTE OF VIROLOGY AND IMMUNOLOGY** UNIVERSITY OF CALIFORNIA SAN FRANCISCO

M.D. and/or Ph.D. investigators with demonstrated research accomplishments in the field of virology, especially as it relates to HIV disease, are invited to apply for a faculty position at the Assistant, Associate, or full Investigator Level within the Gladstone Institutes and concurrent faculty appointment at UCSF. The successful candidate will receive salary and research support from the Gladstone Institutes and also will have a unique opportunity to interact with the well-established clinical environment at the San Francisco General Hospital campus of UCSF for HIV and HIVrelated research.

Please submit a curriculum vitae and the names of three references to: Chair, Search Committee, Gladstone Institute of Virology and Immunology, UCSF, P.O. Box 419100, San Francisco, California 94141-9100.

On the Internet: http://gladstone.ucsf.edu

The Gladstone Institutes and UCSF are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.

### COMPETITIVE ASSESSMENT SCIENTIST

The Upjohn Company, a wholly-owned subsidiary of Pharmacia & Upjohn, Inc., and a recognized leader in research, production and marketing of quality pharmaceuticals, invites applications for the position of Competitive Assessment Scientist.

We are seeking scientists to develop strategic assessments of the competitive environment in CNS, inflammation, women's health, infectious diseases, critical care medicine and emerging technologies. Candidates should be proficient in written and oral presentation formats, have a Ph.D., M.D., or master's degree with demonstrated mastery of scientific, technical and analytical skills, proficiency in interpretation of the scientific literature, and have excellent organizational, interpersonal and communication skills. Some travel is required.

Pharmacia & Upjohn, Inc. offers a competitive salary. benefits and relocation assistance commensurate with the expected contribution. For confidential consideration please send your resume/CV to: **Pharmacia & Upjohn**, **Inc., Corporate Recruiting, Position #307, 7000 Portage Road, Kalamazoo, MI 49001.** We are an equal opportunity employer with a commitment to workplace diversity. **E-mail to: RECRUIT@PWINET.UPJ.COM** 



Pharmacia & Upjohn



### It takes world-class employees to make a world-class company.

At Abbott Laboratories, our professionals are researching, developing and marketing the health care products that will make a significant impact on generations to come. As we expand our research efforts, the Genomics Research Area of our Pharmaceutical Products Division is seeking multi-disciplinary research scientists to apply the revolutionary tools of genomics and molecular biology to drug discovery.

We are building a team of scientists in the areas of genomics, biology, and bioinformatics who will accelerate the discovery of innovative drugs. Qualified researchers will be trained in specific therapeutic areas and skilled in uncovering new biological targets through the application of bioinformatics and genomic science. Our enhanced capabilities in biology and molecular biology will be supported by expanding state-of-the-art facilities for nucleic acid and protein sequence analysis. Scientists chosen for these positions will play a critical role at the interface between genomics and the therapeutic disciplines. The ideal candidates will be team-oriented individuals with a record of accomplishments as evidenced by publications, and a background in pharmaceutical drug discovery.

### Research Scientist — Molecular Immunology

You will be responsible for research focusing primarily in the areas of inflammation, allergy and autoimmunity. Ideal candidates will have a Ph.D and 3+ years of post-doctoral experience in Molecular Immunology, and proven skills in the use of genomic information to aid in the process of target discovery and development. (Job # 96-JKK-0847)

### Research Scientist – Molecular Neurobiology

You will be responsible for research in the areas of neurocytokines, signal transduction and neurodegenerative diseases. Ideal candidates will have a Ph.D. and 3+ years of post-doctoral experience in Molecular Neurobiology, and proven skills in the use of genomic information to aid in the process of target discovery and development. (Job # 96-JKK-0854)

### Research Scientist – Molecular Microbiology

Ideal candidates will have a Ph.D. in Microbiology or Molecular Microbiology. Solid training and professional experience in bacterial metabolism, microbial physiology and microbial genetics is required. Experience in the use and application of emerging genetic information to microbial target identification is required. (Job # 96–JKK–0846)

### Research Scientist – Molecular Metabolism

You will be responsible for research in the areas of diabetes, obesity, bone disorders and other metabolic diseases. Ideal candidates will have a Ph.D. and 3+ years of post-doctoral experience in Molecular Metabolism, and proven skills in the use of genomic information to aid in the process of target discovery and development. (Job # 96-JKK-0902)

### Research Scientist – Bioinformatics and Computational Biology

Ideal candidates will have a Ph.D. in Computational Sciences with practical experience in Bioinformatics and Genomic Biology, as well as be skilled in the integration of the tools of bioinformatics and genomics with the drug discovery process. Applicants should have extensive experience in the development, adaptation and integration of computational sequence analysis methods for genomic database searching. (Job # 96-JKK-0341)

### Research Associates — All Therapeutic Areas

You will be responsible for providing technical assistance in the areas of biology and molecular biology. Ideal candidates will have a Bachelor's and/or Master's degree in Biology or Molecular Biology, with several years experience in the practical application of molecular tools to the drug discovery process. Proven skills in the area of Genomic Biology within a therapeutic discipline preferred. (Job # 96-JKK-0848)

With 50,000 employees worldwide, and more than \$10 billion in annual sales, we've established ourselves as a respected global business and innovative leader in the changing health care industry. For consideration, please send your resume with salary history to: Abbott Laboratories, Job #

D583, AP6B, 100 Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.



### OUR EXPANDING UNIVERSE

In May 1995, we filed for U.S. regulatory approval of a new treatment for multiple sclerosis. We are now in the process of building the infrastructure and capabilities we will need to commercialize this drug, which is our first proprietary product. Our record of success to date is based on the hard work and dedication of our employees. We are now seeking a number of committed professionals with strong values to join the Biogen team.

### Scientist - QC Technical Services

You will assume responsibility for the development and validation of analytical methods for proteins and peptides, as well as contribute to our analytical research and development programs. Specific accountabilities involve documenting scientific experiments; writing technical, method development and validation reports; and supervising a junior scientist. To qualify, candidates must have a PhD in Analytical Chemistry, Biochemistry or equivalent and 3 years' experience, or an MS in Chemistry, Biochemistry or related field and 5 years' experience in pharmaceutical/biopharmaceutical analysis. Hands-on expertise in biochromatography, electrophoresis with an emphasis on protein and peptide analysis is required. Strong communication skills and knowledge of cGMPs and cGLPs are musts. (Code: JM)

### Research Scientist - Protein Chemistry

This is an excellent opportunity for a creative PhD level scientist with 6 years of training in protein chemistry to assist in the discovery and development of novel therapeutic agents. Specifically, this individual will work as part of a team and should possess supervisory experience. The ideal candidate should be proficient with modem methods of protein purification and characterization, as well as possess assay set-up expertise. The ability to contribute to studies designed to elucidate the biology and mechanism of action of proteins is essential. (Code: JT)

### Sr. Process Scientist – Protein Purification

This scientist will play a critical role in the development and optimization of purification methods of recombinant therapeutic proteins for use in human clinical trials and commercial production. This will involve developing preparative chromatographic and other isolation methods, supporting transfers of processes to our manufacturing group as well as applying analytical methods supporting purification development. Applicants must have a PhD in Chemistry or Biochemistry, 3+ years' industry experience in process development protein purification and an understanding of GMPs. Strong written/verbal communication skills and computer experience are required. (Code: DP)

### **Analytical Chemist**

You will develop and validate protein chemistry methods necessary for development projects. This will involve chromatographic and electrophoretic (SDS-PAGE, IEF, Western Blots) characterization and analysis of products at various development stages, as well as batch analysis for QC releases and stability studies. GMP compliance for all activities is required. To succeed, candidates must have a BS/BA in Chemistry, Biochemistry or related field and 3-5 years' experience with protein chemistry and analysis by UV/Vis Spectroscopy, peptide mapping and HPLC of proteins and peptides. Expertise with SDS-PAGE and IEF gel systems, plus capillary electrophoresis is a plus. Familiarity with cGMP's and/or cGLP's are essential. (Code: JM)

### Biophysical Protein Chemist - Formulation

Our Process Development Group has an opening for a Senior Process Scientist to lead the development of new therapeutic protein formulations. Requirements include a PhD in an appropriate specialty, publications covering some aspect of biophysical protein chemistry (e.g.; spectroscopic, thermal or hydrodynamic analytical methods), and 5-10 years' industrial experience with protein formulation. Additional required development experience includes lyophilization and technology transfer to an aseptic filling environment operating under GMP. Experience using statistical experimental design and HPLC to study protein decomposition products preferred. (Code: DP)

Biogen offers what few companies in our industry can — Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, this is your opportunity to join our expanding universe. Please forward your resume, indicating appropriate job code, to:

Dept. SC, Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142. FAX: (617) 679-2546



Biogen is an Equal Opportunity Employer. http://www.careermosaic.com/cm/biogen TENURE-TRACK POSITION NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

### CELL CYCLE REGULATION AND MOLECULAR CARCINOGENESIS

A position is available in the Laboratory of Environmental Carcinogenesis and Mutagenesis for an outstanding scientist to develop an independent program of basic research in the area of cell cycle control alterations during the process of carcinogenesis. Applications are invited from candidates with a strong research record in molecular cell cycle control and carcinogenesis as demonstrated by having significant impact in the field. Priority will be to applicants whose expertise includes genetic and molecular approaches to investigate the impact on cell cycle regulation in mammalian cells of exposure to environmental carcinogens. Minimum qualifications are a doctoral degree in the biomedical sciences, a minimum of three years postdoctoral experience and research publications in prestigious peerreviewed journals. Desirable additional qualifications include genesit transformation; molecular consequence of proto-oncogene activation on cell cycle regulation; inactivation of tumor suppressor genes; cell cycle control that predispose to cancer.

The position is available to citizens or permanent residents of the United States. Salary will be commensurate with experience and qualifications of the candidate. Applications from women and minority groups are particularly welcome. Interested individuals should provide a curriculum vitae with bibliography, a brief statement of research interests, and arrange for three letters of recommendation to be sent by June 15, 1996.

LISA ROGERS (HNV96-7), HUMAN RESOURCE MANAGEMENT BRANCH, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES, PO BOX 12233, RESEARCH TRIANGLE PARK, NC 27709 (919) 541-3316

NIEHS/NIH is an Equal Opportunity Employer

### Postdoctoral Scientist Job # 9520

Ciba's Biotechnology Research Unit (RTP) is seeking a Ph.D. for a Postdoctoral position in the Optical Mapping Group. The successful candidate will possess a background in Biological or Chemical Sciences with 2-3 years of molecular lab experience. The selected candidate will apply optical mapping and other molecular and genetic techniques to the study of plant genomes. Experience with large DNA-insert libraries and Unix Computer Systems helpful. Additionally, the position will be part of a collaborative research effort among industrial and academic scientists to advance the field of Optical Mapping Technology.

We offer competitive salaries and a generous benefits package which includes relocation assistance.

Resumes should be forwarded with a cover letter (which should included Job# 9520) and a list of three (3) references to: Ciba Biotechnology Research Unit, Human Resources Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257. Resume deadline is: April 26, 1996.



We are an Equal Opportunity Employer, m/f/d/v.



Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES) encourages submission of proposals or letters of intent for ocean drilling in 1999 and beyond. Proposals should address the scientific goals identified in the newly published Ocean Drilling Program (ODP) Long Range Plan. The scope of proposals may vary from individual sites to multi-leg drilling programs, and may involve drilling from an ODP platform, a non-ODP platform in which ODP operations play a role, or multiple platforms. JOIDES Resolution will continue to be the primary ODP vessel through 2003. Beyond that, JOIDES anticipates the addition of a Japanese vessel equipped with a deep drilling riser system.

Proposals or letters of intent may be submitted by individuals, groups of investigators, or national/international geoscience programs. Proposals will be evaluated and ranked by the JOIDES advisory panels. Ranking is based on scientific merit, relevance to the ODP Long Range Plan, feasibility, and readiness in terms of surveys, safety, and equipment availability.

PROPOSAL FORMS AND INFO: JOIDES Office, Department of Earth Sciences University of Wales, PO Box 914 Cardiff, CF1 3YE, UNITED KINGDOM Tele: 44 1222 874541 Fax: 44 1222 874943 e-mail: joides@cardiff.ac.uk ODP LONG RANGE PLAN: Joint Oceanographic Institutions, Inc. 1755 Massachusetts Ave., NW, Suite 800 Washington, DC 20036-2102, USA Tele: (202) 232-3900 Fax: (202) 232-8203 e-mail: joi@brook.edu

### Pharmacology Chair Tulane Medical School

The School of Medicine at Tulane University Medical Center invites applications and nominations for the applications and nominations for the position of Professor and Chair of the Department of Pharmacology. The position offers exciting opportunities to lead this highly successful department through new research frontiers in the research frontiers in the pharmacological sciences and innovative approaches to medical education. Extensive interactions are possible with other medical school basic and clinical science departments and interdisciplinary Medical Center research initiatives in cancer biology, cardiovascular medicine, infectious diseases, neuroscience, gene therapy women's health, bioenvironmental sciences, and basic molecular and cellular biology.

Applications and nominations may be sent to: Pharmacology Search, Office of the Dean, Tulane University School of Medicine, 1430 Tulane Avenue, SL77, New Orleans, LA 70112. Applicants should submit a letter of interest accompanied by a comprehensive curriculum vitae and the names and addresses of four references. The deadline for receipt of applications is July 15, 1996.

Tulane University is an AA/EEO Employer. Women and minorities are encouraged to apply.

### **Senior Applications Scientist**

Affinity Sensors, a leading innovator in optical biosensor technology for the study of biomolecular interactions, has an immediate opening for a senior applications scientist.

The ideal candidate will possess a Ph.D. in Biochemistry, Molecular Biology, Immunology or a related discipline. Experience with conventional biomolecular binding assays, kinetics calculations, equilibrium and affinity measurements is desirable. The selected individual will also possess excellent communication, presentation, and computer skills and must be willing to travel approximately 50% of the time.

The senior applications scientist acts as the technical liaison between Affinity Sensors and our customers. Main responsibilities include technical presentations of optical biosensor theory and applications, methods development and demonstration of instrumentation, customer training and applications support pre-and post-sale, communications of new optical biosensor applications to R&D, and contribution to the preparation of technical publications.

Affinity Sensors offers a challenging and stimulating opportunity to work with researchers throughout the country. For further consideration, please forward your resume and salary requirements to:

Affinity Sensors, 53 West Century Road, Paramus, NJ 07652, Fax: 201-265-1977, Email 71612.3410@compuserve.com



### THE UNIVERSITY OF IOWA COLLEGE OF MEDICINE Molecular Biology and Genetics

The University of Iowa College of Medicine seeks applicants to fill a new tenure track faculty position as part of a program expansion in molecular biology and genetics. Established scientists as well as new investigators having a Ph.D., M.D., or M.D./Ph.D. degree(s) are invited to apply. New investigators should have a minimum of two and preferably three years of postdoctoral research experience. Areas of emphasis include disease gene discovery and characterization, genetic animal models of disease, study of diseases with complex patterns of inheritance, and genetic epidemiology. Expertise in molecular techniques such as large scale genotyping, cDNA library construction, DNA sequencing, and/or other molecular techniques useful for facilitating genetic approaches to understanding of human disease is highly desirable. Applicants with expertise in the development of original methods and research designs are desired. The successful applicant will have a variety of opportunities for interdepartmental collaborations involving basic and clinical science research and will receive an attractive start-up package. Salary and faculty rank will be commensurate with experience and qualifications. The departmental affiliation for the applicant's faculty appointment will be based on the applicant's scientific research orientation.

### **Cellular Communication and Signal Transduction**

The University of Iowa College of Medicine seeks applicants to fill a new tenure track faculty position as part of a program expansion in cellular communication and signal transduction. Established scientists as well as new investigators having a Ph.D., M.D., or M.D./Ph.D. degree(s) are invited to apply. New investigators should have a minimum of two and preferably three years of postdoctoral research experience. Areas of emphasis include cytokine receptor biology, receptor and nonreceptor tyrosine kinases, control of cellular growth and transforma-tion, and signal transduction in developmental biology. Preference will be given to investigators with expertise using combinations of molecular and biochemical technology to pursue these areas of investigation. Applicants with expertise in the development of original methods and research designs are desired. The successful applicant will have a variety of opportunities for interdepartmental collaborations involving basic and clinical science research and will receive an attractive start-up package. Salary and faculty rank will be commensurate with experience and qualifications. The departmental affiliation for the applicant's faculty appointment will be based on the applicant's scientific research orientation.

Candidates should send a statement of research interests, a curriculum vitae, three recent publications, and the names of three individuals who can be contacted as references to:

Allyn L. Mark, M.D. **Associate Dean for Research College of Medicine** 

The University of Iowa 220 CMAB Iowa City, IA 52242-1101 The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

### **Postdoctoral Fellowship**

Molecular Biology, Virology, and Immunology

### of Schizophrenia and Bipolar Disorder

The Theodore and Vada Stanley Foundation has established a novel laboratory and training program in Molecular Neurobiology and Neurovirology at the Johns Hopkins University School of Medicine under the direction of Robert Yolken, M.D. Fellowships include full salary support plus research and travel expenses for three (3) years. The program, which began in 1995, has thus far recruited four (4) fellows.

Preceptors are members of the Johns Hopkins Medical School faculty in the Departments of Pediatrics, Psychiatry, Neurology, Neurovirology, Medicine, and from the Program of Cellular and Molecular Medicine. Fellows will have the opportunity to work with several preceptors during the course of their fellowship. It is expected that fellows will have an M.D. and clinical training in neurology or psychiatry or a Ph.D. in a relevant basic science, or both. The goal is to bring together fellows and faculty members with diverse backgrounds into a program to discover the molecular and cellular bases of bipolar effective disorder and schizophrenia, with a focus on the role of infectious and immune events. To obtain an application or further information on this program, contact:

Robert H. Yolken, M.D. **Professor of Pediatrics** Director, The Stanley Neurovirology Laboratory The Johns Hopkins University 600 N. Wolfe Street, Blalock 1111 Baltimore, Maryland 21287-4933 Office: (410) 995-3271 Fax: (410) 614-1491 E-Mail: acusic@welchlink.welch.jhu.edu

### PHARMACOLOGIST PHARMACOKINETICS/METABOLISM



Genentech is a pace-setting company, internationally known for discovering, developing, manufacturing and marketing pharmaceuticals for significant unmet medical needs. We are currently seeking a highly motivated scientist to develop animal models to support the development of recombinant proteins and small molecule therapeutics

You will collaborate with pharmacokinetics, metabolism and toxicology scientists in the interpretations of data and development of experiments to investigate the pharmacokinetics, pharmacodynamics, metabolism and toxicology of candidate therapeutic molecules in relevant animal models. In addition, the successful candidate will interface with research scientists to incorporate existing and emerging information on the drug's mechanism of action into the development of the drug. This opportunity requires a PhD in Pharmacology or related discipline and experience in animal physiology/in vivo animal model development. Postdoctoral experience and 2-5 years of relevant industry experience are desirable.

Join us and enjoy our exciting success and progressive benefit package that includes free health club membership, 3 weeks paid vacation, 6 weeks sabbatical after 6 years, fully paid medical/dental/vision coverage, and Company stock purchase opportunities for full time employees. Check us out at http://www.gene.com/ and then send your resume to Genentech, Inc., Human Resources Dept. VSJS, 460 Pt. San Bruno Blvd., South San Francisco, CA 94080. We value creativity at Genentech, but our scanning equipment does not. Please avoid bold, underline or italic type faces. You may also e-mail your resume with the department code to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.



### ASSOCIATE DIRECTOR

The National Research Council (NRC) is seeking an Associate Director for its Board on Sustainable Development (BSD). Will also serve as the Study Director for studies performed under the BSD. The recently formed Board has responsibility for a broad range of studies and activities relating to environment, natural resources, and sustainable development of natural resources and national and international economies. In addition, the Board oversees the activities of a number of NRC units relating to the US Global Change Research Program (USGCRP). The incumbent will report to the Director, NRC (USGCRP). The incumbent will report to the Director, NRC Board on Sustainable Development (BSD) and will share responsibility for supporting the work of the Board and its standing committees, with particular emphasis on global change research studies and activities. Duties include writing, reviewing and editing background papers, meeting documents, and formal NRC reports; organizing and supporting meetings and study sessions; maintaining cognizance of key issues and identifying opportunities for new studies; conducting and reviewing scientific assessments; and assisting in maintaining staff liaison with the federal Committee on Environment and Natural Resources with specific responsibility for global change research and observing system issues. Requirements include a Ph.D. or equivalent, preferably in an environmental earth science, life, or social science related field; an exceptional breadth of substantive knowledge in environmental science and policy; at least four to five years of senior experience in environmental science and policy issues; and demon-

strated ability to communicate effectively with senior officials in the executive and legislative branches. Applicants should send curriculum vitae and references to: Policy Division, NRC (NAS 242-LM), 2101 Constitution Avenue, NW, Washington, DC 20418. EOE.



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SENIOR GROUP LEADER, DISEASE MODELS

Genetic Therapy, Inc., based in the Washington D.C. area, is expanding its research activity in the area of in vivo gene therapy for cystic fibrosis and other diseases of the lung. We are seeking a highly motivated individual to lead a research team devoted to the evaluation of pulmonary gene transfer using viral and nonviral vectors in various models. This program will complement existing activities in adenoviral vector development and will provide collaborative interactions with research groups working to develop gene therapies for cystic fibrosis including clinical studies in man. Applicants should have an M.D. degree with at least 5 years of relevant research experience and must have experience with pulmonary disease models or gene therapy and familiarity with basic research in cystic fibrosis. In addition, applicants should have extensive laboratory experience working with murine or rat animal models including working skills in small animal surgery. Experience in working with models of aerosol and other routes of administration and evaluation of experiment agents to the lung is highly desirable. Excellent communication skills, supervisory experience and a strong publication record is required. Any experience in conducting or association with pulmonary clinical studies would be highly desirable. GTI offers a stimulating and challenging research environment with an excellent salary and benefits package. Please specify position when applying. Fax or send resume to:

Genetic Therapy, Inc. 938 Clopper Road Attn: 96-013-7/S Gaithersburg, Maryland 20878 Fax: (301) 948-0503 Genetic Therapy is an Equal Opportunity Employer United States Surgical Corporation, a leading innovator in the design and manufacture of surgical devices, is expanding its Biotechnology staff. You can be part of a dynamic team of scientists investigating a new generation of wound healing products for soft and hard tissue. In addition, USSC had entered into agreement with Alexion Pharmaceuticals, Inc. regarding Alexion's development of transgenic pigs for organ transplantation. Our state-of-the-art research facility is located in North Haven, CT, just 10 minutes from Yale University.

### BIOCHEMISTRY POSTDOCTORAL SCIENTIST

An immediate position is available for a creative and motivated scientist. Requires a recent Ph.D. with a strong background in Biochemistry, Molecular Biology, Cell Biology or related field. Experience in recombinant protein expression, immunoassays, tissue culture, and construction and screening of cDNA libraries is desirable.

### BIOCHEMISTRY RESEARCH TECHNICIAN

Requires a B.S. or M.S. in Biochemistry, Molecular Biology or a related field. Knowledge of protein, DNA, and RNA manipulations is essential. Knowledge of large scale fermentation a plus.

We offer a competitive salary and an excellent benefits package. For immediate consideration, send your resume, to: ANDREA DelVECCHIO, HUMAN RESOURCES, UNITED STATES SURGICAL CORPORATION, 195 MCDERMOTT ROAD, NORTH HAVEN, CT 06473. We are an equal opportunity employer M/F/D/V.





NeoRx Corporation, a Seattle-based, publicly held biotechnology company develops targeted biopharmaceuticals to treat cancer and cardiovascular disease.

We are currently seeking an innovative, experienced scientist to lead and build our molecular biology research team. This position requires a Ph.d. in molecular biology with relevant work experience. The successful candidate must have a record of accomplishment insofar as: independently initiating, leading and conducting product-oriented research activities; DNA sequencing, hybridization, library construction, and analysis of recombinant vectors; gene cloning and expression techniques in both prokaryotic and eukarytoic systems; construction of novel vectors for eukarytoic systems; scale-up and process development experience; an established publication record, excellent communication skills, and successful project management experience are essential; and designing and leading research tasks and working with professional multi-disciplinary teams on a broad range of programs.

Interested candidates are invited to forward their resume with a cover letter, in strict confidence, to: Denise Carlson, NeoRx Corporation, 410 West Harrison Street, Seattle, WA 98119; fax: (206) 284-7112; e-mail: dcarlson@neorx.com NeoRx is an equal opportunity employer.

### ohsu H E A L

### **OREGON HEALTH SCIENCES UNIVERSITY**

### **Director, Transgenics Service Lab**

Oregon Health Sciences University invites applications for the position of **DIRECTOR** of a newly established Transgenics Service Lab partially funded by an award from the Howard Hughes Medical Institute. Candidates must possess an M.D., Ph.D., D.V.M. or equivalent doctoral degree and have considerable experience in the generation of transgenic mice by both pronuclear injections and blastocyst injections/morulae aggregation of recombinant embryonic stem cells. The director will manage the lab and breeding colonies and provide transgenic mice and homologous recombination in ES cells on a fee-for-service basis to investigators throughout the University. The successful candidate may hold a primary academic appointment in the Department of Animal Care and a secondary appointment in a basic science department depending on qualifications and experience. The position is available immediately and the successful candidate should be prepared to assume responsibility by the summer of 1996. The closing date for applications is May 10, 1996. Please submit a letter of application, curriculum vitae with bibliography, and the names and addresses of three references to:

**Transgenic Search Committee** Dept. of Biochemistry & Molecular Biology, L224 **Oregon Health Sciences University** 3181 S.W. Sam Jackson Park Road Portland, OR 97201-3098

OHSU is an Affirmative Action/Equal Opportunity Employer

### HUMAN GENETICS FACULTY POSITIONS

### THE UNIVERSITY OF CHICAGO

A major expansion in Human Genetics has been initiated to develop an outstanding program in Clinical Genetics, Molecular Diagnostics, and human genetics research. A number of new faculty positions are available including:

### **CLINICAL DIRECTOR**

A senior faculty appointment with responsibilities for developing and directing the clinical genetics activities of the medical school as well as the residency and fellowship training program in genetics. Resources available for the Clinical Director to recruit one additional full-time clinical faculty member. Board certification in Clinical Genetics and significant experience and scholarly activity in any area of clinical genetics is required.

### **MOLECULAR DIAGNOSTIC** LABORATORY DIRECTOR

Faculty appointment with responsibility for directing and expanding the molecular diagnostic activities of the program. Must be Board certified or Board eligible in Clinical Molecular Genetics with a strong commitment to molecular diagnostics, diagnostic technology development, and collaborative research. Send letter of interest and CV to: Human Genetics Search Committee, Attn: Dr. Carole Ober, Department of Obstetrics & Gynecology, University of Chicago, 5841 S. Maryland Ave., MC 2050, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer



THE UNIVERSITY **OF CHICAGO** 

### Assistant Professor Chemistry & Biochemistry

The University of Delaware invites applications for a tenure track position at the rank of assistant professor for which budgetary approval is pending in the Department of Chemistry and Biochemistry. Appointment at a higher level will be possible for exceptionally well-qualified candidates. Applicants should have a Ph.D. in chemistry or a related discipline, a strong academic record and an excellent record of research accomplishment. The successful candidate will be expected to conduct an active and innovative research program in any area of chemistry or biochemistry and to teach courses at the undergraduate and graduate level in one of the following areas: analytical chemistry, biochemistry or physical chemistry. Candidates with interdisciplinary research interests and with research interest complementary to existing research strengths in our department are particularly encouraged to apply. Applicants should send a curriculum vitae an outline of a proposed research program and their teaching interests and three letters of recommendation to Professor Dennis Evans, Department of Chemistry and Biochemistry, University of Delaware, Newark, DE 19716. Applications from women and under represented minorities are particularly encouraged. The closing date for receipt of applications is May 15, 1996.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority

Group Members and Women.



### **Immunology Faculty Positions**

The Department of Molecular Microbiology and Immunology, University of Missouri, Columbia, seeks to fill **two** full-time tenuretrack faculty positions in Immunology. Candidates will be expected to develop a vigorous, externally funded research program, direct Ph.D. students and participate in teaching graduate and/or medical students.

1) Assistant Professor: Candidates should have a Ph.D. or equivalent degree with a minimum 3 years of relevant postdoctoral experience, significant publications and evidence of potential for a sustained commitment to high-quality research.

2) Associate Professor: Candidates should have demonstrated potential for maintaining an active, independent research program in Immunology as evidenced by quality publica-tions and external funding. This individual will also serve as director of the Cell and Immunobiology Core Facility, part of the University of Missouri Molecular Biology Program, which provides tissue culture reagents, hybridoma production and flow cytometry to investigators.

Salary for both positions is competitive and commensurate with experience. Interested candidates should submit a curriculum vitae, statement of research interests and goals and the names, addresses and telephone numbers of at least three references to: Dr. Helen B. Mullen, Immunology Search Committee, Department of Molecular Microbiology and Immunology, DC 385.00, University of Mis-souri-Columbia, Columbia, MO 65212. Noncitizens please include visa status. Screening of applications will start 15 May, 1996 and will continue until the positions are filled. The University of Missouri is an affirmative action-equal opportunity employer and encourages applications from females and minorities

## Discovery, Innovation, Opportunity...at SEARLE

As a worldwide leader in the pharmaceutical industry, Searle has set an innovative course in the research and development of new drugs.

### **Research Scientist**

G.D. Searle's Cardiovascular Diseases Research Department, located in St. Louis, Missouri, is seeking a Scientist to support experiments aimed at discovering novel therapies for the treatment of diabetes mellitus, specifically non insulin dependent diabetes.

Responsibilities include animal handling, tissue dissection and processing, enzyme and metabolite assays, electrophoresis and Western blotting, data analysis, record keeping, and laboratory maintenance.

Requirements include M.S. in Biological Sciences and experience in problem solving and experimental design. The successful candidate will be highly self-motivated, independent, and possess an interest in physiology ranging from the organismal to mole-cular level. The ability to work with other scientists in a multidisciplinary environment is essential. Other desirable qualifications include experience working with isolated or perfused organs or cultured cells.

G.D. Searle is a subsidiary of Monsanto Company. Interested candidates should send resume to: SEARLE R & D; 700 Chesterfield Village Parkway; Mail Zone BB5B (EAG); St. Louis, MO 63198. Monsanto is an equal opportunity employer. M/F/D/V.

SEARLE On track to being on top

### POSITIONS OPEN

#### MULTIPLE SCLEROSIS NEUROLOGIST/ NEUROIMMUNOLOGIST

A NEUROLOGIST or NEUROIMMUNOLO-GIST with expertise in basic science research oriented to Multiple Sclerosis is sought at the St. Michael's Hospital in Toronto. Training and research ability in Multiple Sclerosis required. The successful candidate will be expected to develop his or her research interests as well as to participate in the clinical and research aspects of the Multiple Sclerosis Program. Academic appointment in the Division of Neurology, University of Toronto, and salary will be commensurate with training and experience. Please send curriculum vitae and letter of applications to:

Please send curriculum vitae and letter of applications to Dr. Paul W. O'Connor, M.D., M.Sc., FRCPC

. Paul W. O'Connor, M.D., M.Sc., FRCP Chief, Division of Neurology St. Michael's Hospital University of Toronto 30 Bond Street Toronto, Ontario M5B 1W8 Canada Telephone: 416-864-5378

In accordance with its employment equity policy, the University of Torouto encourages applications of qualified women and men, members of visible uninorities, aboriginal persons and persons with disabilities. In accordance with the Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

### EVOLUTIONARY GENETICS (Rank Open)

We are searching to fill **TWO POSITIONS**, one senior and one junior, in evolutionary genetics; theoretical, empirical or both. We are particularly looking for candidates whose research complements the interests of our current faculty, including the areas of human, plant or microbial population genetics, or evolutionary quantitative genetics. Interested persons should submit their curriculum vi-

tac, relevant publications, and the names of three referees to: Genetics Search Committee, Department of Ecology and Evolution, University of Chicago, 1101 East 57th Street, Chicago, IL 60637. The deadline for receipt of applications is July 30, 1996. We anticipate interviewing candidates in the fall of 1996 and the positions beginning as early as September 1, 1997.

#### SCHOOL OF BIOMEDICAL AND HEALTH INFORMATION SCIENCES (SBHIS) University of Illinois at Chicago Faculty Position

SBHIS is seeking a **TENURE-TRACK FACULTY** member (nine-month appointment) to participate in teaching and research programs in this evolving discipline. Candidate should have carned doctorate with strong commitment to research and education as well as evidence of external funding. Senior level experience with computer based health information systems preferred. Applicants should submit current curriculum vitae with names and addresses of references to:

Walter B. Panko, Director UIC, CAHP, SBHIS 1919 West Taylor Street (m/c 530) Chicago, IL 60612-7249

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

> FACULTY POSITIONS Tenure-Track Immunology Tenure-Track Virology

The Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin–Madison, is seeking applicants for **TENURE-TRACK** faculty positions, one in Immunology and the other in Virology. The positions require individuals with a strong commitment to developing an extramurally funded research program, to training graduate students, and to participating in the professional degree teaching program of the department. Salary and rank are commensurate with experience. Application deadline is May 15, 1996.

Send a letter of application, curriculum vitae, and names of at least three references to: Dr. Ronald D. Schultz, Professor and Chair, Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, 2015 Linden Drive West, Madison, WI 53706. Telephone: 608-263-9888. The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer. Minorities and women are strongly uged to apply.

### POSITIONS OPEN

Marquette University Biology Department invites applications for a tenure-track ASSISTANT PROFES-SOR, to teach a one-semester introductory biology course annually and a graduate course or seminar in alternate years. The successful candidate should have at least two years of postdoctoral research experience and must develop an extramurally funded research program that takes a molecular approach to evolution, ecology, or microbiology. Send curriculum vitae, a statement of research, and three letters of recommendation to: Dr. Walter Fredricks, Marquette University, Department of Biology, WLS 112, P.O. Box 1881, Milwaukee, WI 53201-1881. Review of applications begins June 1, 1996, and will continue until the position is filled. The position is available as early as August 16, 1996. Marquette is au Equal Euroleyneut Opportunity/Affinative Action Eurology.

### STAFF ASSOCIATE Department of Medicine, Columbia University

Needed for studies involving tissue culture relevant to lipoprotein metabolism. Methods used include radio-labeling, gel electrophoresis, and autoradiography. Molecular biology methods will be used to assist investigators transfecting cultured cells and making vectors for transfection studies employing a full spectrum of RNA techniques. Master's degree and previous experience in lipoprotein metabolism required. Curriculum vitae to: Ms. Irene Franck, Administrator, Division of Preventive Medicine and Nutrition, Columbia University, 630 West 168th Street, 9-510, New York, NY 10032. We take Afimative Action toward Equal Opportunity.

### BIOLOGIST Community/Behavioral Ecologist

ASSISTANT PROFESSOR, tenure-track position, in community or behavioral ecology of terrestrial or freshwater animals. Mammology/herpetology emphasis preferred. Ph.D. required. Strong interest in undergraduate research required. Must be able to teach field oriented classes and incorporate local environment into undergraduate teaching and research. Will be expected to teach introductory biology as well as upper-level lectures and lab in area of specialty. Undergraduate teaching experience preferred. Position is available to begin August 15, 1996. Screening will begin immediately and will continue until the position has been filled. Send a letter of application, curriculum vitae, and three letters of reference to: Dr. Colleen A. Lohr, Chair, Department of Biology, Coastal Carolina University, Box 1954, Conway, SC 29526. Coastal Carolina University is an Equal Opportunity/ Affimative Action Employer.

### POPULATION GENETICIST

The Division of Biological Sciences at the University of Missouri–Columbia (UMC) continues a multi-year hiring program with a tenured **ASSOCIATE PROFES**-SORSHIP for a population geneticist with a strong back ground in evolutionary theory. The ideal candidate will employ theoretical or molecular techniques in the study of natural or experimental populations with an emphasis on the mechanisms of evolutionary change. Opportunities for collaboration abound: UMC has strong interdisciplinary programs in genetics and molecular biology, and the Division has major research programs in the evolution of behavior and plant population biology. A highly competitive salary, excellent start-up package, modern research laboratories, and an active graduate program provide an extremely supportive environment. Candidates should have developed an internationally recognized, funded research program and have a record of highest quality teaching at the undergraduate and graduate levels. Send curriculum vitae, reprints of publications, statement of research and teaching interests, and three letters of reference to:

#### Dr. John David Division of Biological Sciences 105 Tucker Hall University of Missouri-Columbia Columbia, MO 65211

Applications should be received by May 24, 1996 to receive full consideration. UMC is an Equal Opportunity/ Affirmative Action/Equal Access Institution. We are finnly committed to fosteing ethnic and racial diversity on our faculty and strongly encourage applications from minorities and women.

### POSITIONS OPEN

### POPULATION DYNAMICIST

The Population Dynamics Branch of the National Ocean and Atmospheric Administration (NOAA)'s Northeast Fisheries Science Center, Woods Hole, Massachusetts, seeks population dynamicist/stock assessment scientists to conduct research on the effects of exploitation and environmental variability on single- and multispecies fisheries. Incumbents should have strong analytic skills as applied to natural resources problems. The Branch is a recognized center of excellence in marine fishery population research and stock assessment, and maintains extensive historical data in a UNIX-based relational computing environment. Closing date is May 17, 1996.

environment. Closing date is May 17, 1996. Applicants must be qualified United States citizens. For application package call or write to: Office of Personnel Management, Raleigh Service Center, 4407 Bland Road, Suite 200, Raleigh, NC 27609. Telephone: 919-790-2882. Ask for announcement number AR0211 for Research Fishery Biologist or announcement number AR0212 for Operations Research Analyst. For additional information about the positions, contact: Kathryn McArthur, NOAA, 200 World Trade Center, Norfolk, VA 23510. Telephone: 804-441-6880. The United States Department of Commerce is an Equal Opportunity/ Affinnative Action Employer.

### OSTDOCTORAL FELLOWSHIPS

TWO POSTDOCTORAL FELLOWSHIPS are available to participate in a multidisciplinary research program focusing on structure-transport relationships and mechanisms of transport of drug molecules across intestinal epithelium. Candidates for one of the fellowships should have a strong background in cell physiology/cell biology; expertise in molecular biology is preferable. Candidates for the second fellowship should have a strong background in organic chemistry with some experience in analytical/bioanalytical techniques and spectroscopy. Expertise in mass spectrometry is preferable. Please send curriculum vitae, a brief description of research interests, and letters of recommendation to: Dr. Dhiren R. Thakker, School of Pharmacy, Beard Hall, CB 7360, The University of North Carolina, Chapel Hill, NC 27599. FAX 919-966-0197.

**POSTDOCTORAL POSITION** available to study primary brain tumor and the regulation of proteins that mediate tumor invasion and motility. Cell culture and transplantation systems will be used to identify and characterize factors involved in tumor invasion. Applicants should have experience in molecular biological and/or cell culture techniques. Send curriculum vitae, statement of interest, and three letters of recommendation to: Dr. Susan Hockfield, Section of Neurobiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510. Email: Susan\_Hockfield@ Quickmail.Yale.cdu.

### INDIANA UNIVERSITY

**POSTDOCTORAL POSITIONS** are available to study the control mechanisms of cytokine gene expression and signal transduction. Candidates with background in molecular biology or biochemistry should send curriculum vitae and addresses of three references to: Dr. Yu-Chung Yang, Walther Oncology Center, Indiana University School of Medicine, IB540, 975 West Walnut Street, Indianapolis, IN 46202. Telephone: 317-274-7512; FAX: 317-274-7592.

**POSTDOCTORAL FELLOW**. Applications are invited for an immediate postdoctoral fellowship in programmed cell death. Candidates must have a Ph.D. or M.D. with laboratory experience in molecular biology and protein analysis. Experience in transgenic mouse technology would be helpful. Studies will examine the genetic regulation of apoptosis in normal and malignant tissue. Submit curriculum vitae and the names of three references to: Mike Clarke, M.D., University of Michigan Medical School, MSRB II, Room C570A, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0668. FAX: 313-763-4226. An Affinnative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** to study opiate receptors, signaling mechanisms, and immunomodulation. Molecular expertise including PCR, DNA sequencing, vector construction, and *in situ* hybridization is essential. Send curriculum vitae and three letters of recommendation to: **Burt Sharp, M.D., Minneapolis Medical Re**search Foundation, 914 South 8th Street, Minneapolis, MN 55404. FAX: 612-347-3915. *Equal Opportuuity Employer.* 

### DISCOVER SUGEN: A LEADER IN SIGNAL TRANSDUCTION RESEARCH

SUGEN, Inc. is a dynamic biopharmaceutical company focused on the discovery and development of drugs for the treatment of cancer and diabetes. We are currently staffing Science professionals at various levels to contribute to our innovative research programs at our San Francisco Bay Area offices.

### IMMUNOLOGY GROUP LEADER

This group will focus on immunosuppression and/or inflammation. The position requires a PhD and several years of experience in immunological research. Experience in signal transduction pathways essential. (Dept. IM)

### PROTEIN TYROSINE PHOSPHATASES GROUP LEADER

You will be prepared with a PhD as well as 2-3 years of postdoctoral experience in the area of protein tyrosine phosphatases. You will join a group studying the regulation and function of this diverse group of enzymes, particularly in regard to their involvement in clinical disease. (Dept. PTP)

### CELL BIOLOGY ASSOCIATE SCIENTIST

Candidates should have a recent PhD/ MSin Molecular biology/genetics/biochemistry or equivalent and have 1-4 years of experience in project-oriented research in an industrial environment. This individual should have strong DNA manipulation and vector construction skills to be part of a research team devoted to the engineering of cell lines which measure receptor-proximal biological events to aid in the development of novel screening assays. Experience in protein expression in eukaryotic cells is essential. Experience with protein phosphates or kinases is desirable. (Dept. CB)

To reply to one of the positions above, please send resume, noting Dept. Code, to: SUGEN, Inc., Attn: HR,515Galveston Drive, Redwood City, CA 94063. Competitive salary and benefits, including stock options, support these positions. Equal Opportunity Employer.



CytoTherapeutics, Inc. is a leader in the development of proprietary products and technology designed to deliver therapeutic substances to the central nervous system (CNS). The Company's CNS-focused technology is designed to provide controlled, site-specific and safe delivery of a variety of novel therapeutic substances across the blood-brain barrier, thereby overcoming a fundamental obstacle in the effective treatment of CNS diseases. The Company is currently developing products for the treatment of chronic pain, ALS, Parkinson's disease and Alzheimer's disease, with additional research efforts directed to several other CNS disorders.

### Associate Director Biological Process Development



### Manager/Scientist Device Biology Group

The Manager of the Device Biology group plays a pivotal developmental role in the process of bringing laboratory concepts to manufacturable entities. You will be responsible for investigating encapsulated device prototypes as they interact with the local tissue environment within the central nervous system. Developmental activities will focus on cell-device and device-host interfaces and exploring in vitro methods for predictive testing of new device concepts. The position requires an individual with a strong background in neurobiology, neuroimmunology or a related field. Qualifications include a Ph.D. with 2 to 4 years' post-doctoral experience and 3-5 years' of experience in a GLP/GMP environment. In addition, the position requires a record of excellent managerial skills, and strong written and oral communication skills.



CytoTherapeutics is a rapidly expanding biotechnology company in Providence, Rhode Island (just 45 minutes south of Boston). We offer extensive professional challenge and encourage your ideas and professional development. We also offer a competitive compensation and benefits package. Please send your C.V. in confidence to:

CytoTherapeutics, Human Resources, 2 Richmond Square, Providence, RI 02906 or fax to: (401) 272-3485. We are an equal opportunity employer.

### SCIENTIST IMAGING LABORATORY (MICROSCOPY)

Wyeth-Ayerst Research, a division of American Home Products Corporation, has a key position available for a scientist to operate our Imaging Laboratory in support of experimental pathology activities within the Pathology Department of Drug Safety in Chazy, New York.

The incumbent will be responsible for providing scientific expertise for the design and completion of safety studies requiring electron, confocal, and imaging microscopy, and will also provide transmission and scanning electron microscopy, confocal microscopy, and image analysis services according to Good Laboratory Practice Regulations. This includes interpreting data and writing reports for studies using the Imaging Laboratory.

A Ph.D. is required with a focus in morphology, anatomy, or pathology desirable, and a minimum of 5 years of experience using electron, confocal or imaging microscopy in an academic or industrial environment. Experience managing projects and/or project teams which completed imaging projects is preferred.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please send your resume with salary requirements to: Wyeth-Ayerst Research, Human Resources Dept., Position #OPSCI-1888, P.O. Box 7886, Philadelphia, PA 19101-7886, or fax your resume (in fine mode if possible) directly into our centralized Research resume database at (610) 989-4854; e-mail: jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume). Principals Only. Equal Opportunity Employer, M/F/D/V.



### POSITIONS OPEN

#### UCLA POSTDOCTORAL/ASSISTANT RESEARCHER Physical Oceanography

The Institute of Geophysics and Planetary Physics (IGPP) at UCLA seeks applicants for a **POSTDOC-TORAL POSITION** in physical oceanography. The successful applicant will calculate numerical simulations of wind-driven ocean circulation using realistic surface wind stress, focusing on the Pacific ocean basin. These solutions will be compared with satellite altimetry and coastal sea level measurements and CTD and XBT hydrographic data to investigate the low frequency variability of the largescale circulation. These phenomena will also be interpreted in terms of theories of transient oceanic waves and currents.

The position is available beginning summer 1996 for a period of one year and is renewable for a period of up to three years, contingent upon progress during the first year. Salary commensurate with experience. Minimum salary: \$35,808.

Applicants must have a Ph.D. in the physical sciences and experience working with ocean dynamical theory and numerical modeling. Experience working with the interpretation of observational data is also desirable.

Please send a curriculum vitae with names, addresses, and telephone numbers of three references to: **Professor** James C. McWilliams, IGPP/UCLA, Box 951567, Los Angeles, CA 90095-1567.

Applications must be received by May 1, 1996. UCLA is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL RESEARCH ASSOCIATE

A position is available immediately for recent Ph.D.'s with suitable skills in cellular immunology and experience in T-cell cloning and epitope mapping. Our laboratory is committed to both basic and clinical research in autoimmune diseases, especially multiple sclerosis and its animal models, giving a lot of potential for professional growth. We offer competitive salaries and excellent benefits. Send résumé, research interests, and names of three references to: Dr. F. Mokhtarian, Professor of Micro/Immunology and Medicine at SUNY, Health Science Center and Maimonides Medical Center, 4802 Tenth Avenue, Brooklyn, NY 11219. Equal Opportunity/Affinnative Action Employer.

**POSTDOCTORAL POSITION** available immediately to study the role of a novel helix-loop-helix transcription factor in cell-specific gene expression in the mammalian peripheral nervous system. Background in molecular/cell biology preferred. Experience with DNAprotein interactions or oligonucleotide library screening desirable. Send curriculum vitae and three references to: Dr. Lynn Rutkowski, Department of Neurology, 514 Abramson Research Center, Children's Hospital, University of Pennsylvania, Philadelphia, PA 19104-4318. Email: rutkowski@email.chop.edu.

#### HEAD OF DATA MANAGEMENT Cancer Clinical Trials

The Eastern Cooperative Oncology Group (ECOG) is a national multicenter cooperative group involved in cancer clinical trials. The ECOG Coordinating Center is looking for a **HEAD** of Data Management to supervise data management staff involved in the quality control and computerization of submitted data. Applicants should have several years of experience in managing data for clinical trials, a good understanding of the role of computers in this process, excellent written and oral communication skills, and experience in supervising staff. For additional details contact:

> ECOG Coordinating Center Frontier Science 303 Boylston Street Brookline, MA 02146-7648 Telephone: 617-632-2971 FAX: 617-632-5414

Closing date for applications is June 1, 1996 Frontier Science—Affinative Action/ Equal Opportunity Employer

### BACTERIAL PATHOGENESIS

**POSTDOCTORAL POSITION** for an NIH-funded study to develop experimental models of *Campylobaeve*induced Guillain-Barre syndrome. Experience in bacterial pathogenesis, immunology, and molecular biology desirable. Send curriculum vitae and names of three references to: Dr. Irving Nachamkin, Department of Pathology and Laboratory Medicine, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104-4283. FAX: 215-662-6655.

### POSITIONS OPEN

### HARVARD MEDICAL SCHOOL DANA-FARBER CANCER INSTITUTE

**POSTDOCTORAL POSITION** is available to study Jak kinase–Stat protein pathways in hematopoiesis and development, using *Drosophila* as a model system. Experience in molecular biology is required. Send curriculum vitae and three references to: **Dr. Charles Dearolf, Dana-Farber Cancer Institute, Room JF225, 44 Binney Street, Boston, MA 02115.** 

**POSTDOCTORAL POSITION**—Position available July 1 to study the actions of the helix-loop-helix protooncogene *TAL1/SCL* in normal erythroid differentiation and leukemogenesis. Current efforts focus on 1) regulation of gene expression and function by erythropoietin (see *JBC*, **270**:11603, 1995) and 2) mechanisms of transformation through use of gene transfer methodologies. Please send curriculum vitae and names of three references to: **Dr. Stephen J. Brandt, Division of Hematology, Room 547 MRB II, Vanderbilt University Medical Center, Nashville, <b>TN 37232.** An Affirmative Action/ Equal Opportunity Employer.

#### POSTDOCTORAL POSITION University of Texas Southwestern Medical Center

A POSTDOCTORAL POSITION is available for a scientist with an interest in developing strategies to engineer proteins and nucleic acids for new function. Successful applicants should possess a willingness to aggressively exploit both biological and chemical techniques. Projects include the dissection of the basis for native protein specificity, novel engineered specificities, and applications for combinatorial chemistry. Please send curriculum vitae and three letters of reference to: Dr. David Corey, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9050. Equal Opportunity Employer.

**POSTDOCTORAL POSITION** in plant molecular genetics available to study the "hormone-like" effects of sucrose on plant gene expression and development, using *Arabidopsis thaliana* as a model system. Experience with molecular biology, genetics, and/or plant biology required. Send curriculum vitae and have three letters of reference sent to: Dr. Suc Gibson, Department of Biochemistry and Cell Biology—MS140, Rice University, Houston, TX 77005. FAX: 713-285-5154; Email: sig@bioc.rice.edu. Affinantive Action/Equal Oppentunity Employer.

#### POSTDOCTORAL POSITION

We are recruiting a **POSTDOCTORAL FELLOW** to study the molecular mechanisms of muscle atrophy in cachexia. A strong background in recombinant DNA technology is required, including experience with nucleic acid sequencing, construction of plasmids and labeled cDNA probes, RNA/DNA hybridization, and blotting. Cell culture experience also useful. Send curriculum vitae plus names and telephone numbers of three references to: **Michael B. Reid, Ph.D., Pulmonary Medicine, Suite 520B, Baylor College of Medicine, One Baylor Plaza, Houston, TX '77030**. Funded by the Baylor/Zeneca Research Alliance.

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### ANTIBODY ENGINEERING

### Molecular Biologist/Immunologist

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, is seeking a Molecular Biologist/ Immunologist to join its Antibody Engineering Group in the Department of Macromolecular Sciences.

As part of a multidisciplinary team of scientists that includes molecular biologists, protein engineers and structural biologists, the selected candidate will be expected to initiate a viable research program in the area of protein engineering in collaboration with other scientists. The candidate will work primarily on the humanization of antibodies and also contribute to engineering of other proteins with potential therapeutic value.

The ideal candidate will have a PhD in a relevant discipline with at least two years' postdoctoral experience, or an MS with at least six years' proven creative accomplishments in a successful (bio)pharmaceutical company. Applications from more senior candidates are also welcomed.

The Department of Macromolecular Sciences is a multidisciplinary department that includes protein design, engineering, characterization and crystallography. Located in our state-ofthe-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send your CV and names of three references to: SmithKline Beecham Pharmaceuticals, Job Code H6-0118, P.O. Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.

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Human Gene Therapy Research Institute (HGTRI), an affiliate of Iowa Health System, has an immediate full-time Administrative Director position available. The qualified individual will be responsible for day-to-day operations including personnel, purchasing, financial and budget management, collaborative agreements, quality assurance administrative policies, and support services. Coordinates fund raising activities and marketing and awareness programs. Advises staff and obtains external consultation for regulatory and quality management.

Requires a Bachelor's degree, MS or MBA preferred. Must possess at least 5 years of management experience, with two years of science related management experience desired. Excellent interpersonal skills a must. Previous physician/research scientist relation experience preferred. Experience in FDA and USDA regulatory affairs highly desirable. Must have working knowledge of Macintosh and DOS systems, database, word-processing and spreadsheet. Must be able to read, write, and speak English fluently.

Iowa Health System offers a competitive salary and comprehensive benefits package to include health insurance options with dental/vision/prescription, PTO, tuition assistance, day care and much more. Please apply to:

> Human Resources Dept. 1313 High Street, Suite 1111 Des Moines, IA 50309 (800) 843-4522 or (515) 241-8114 *EOE/AA/M/F/D/V*

**T**elecommunications: Field for the 1997 **A**ustralia **P**rize



The Australia Prize is a prestigious international prize for outstanding achievement in selected areas of science and technology which promote human welfare. The Prize, which consists of \$A300,000 and an inscribed medal, was instituted by the Australian Government in 1989.

The 1997 Australia Prize will be awarded in the field of Telecommunications. This field includes both the services offered by the worldwide networks which provide voice telephony facilities, and the technology used to construct and support it. This includes – but is not limited to – transmission systems, switching systems, access techniques, network management software, fibre optics, broadband technology, wireless technology, microwave technology, cellular technology, frequency modulation, packet switching, satellite technology and signal processing techniques.

Nominations for the 1997 Australia Prize close on 31 July 1996. Nomination information on the Prize is available from the Australia Prize Secretariat at the following address:

Australia Prize – GPO Box 9839, Canberra, ACT 2601, Australia. Fax: 61-6-276 2002. Email: ausprize@dist.gov.au.

### The 1996 Australia Prize

The 1996 Australia Prize was recently awarded to four creative scientists for their work in pharmaceutical design.

A giant in the world of pharmaceutical design, Belgium's Dr Paul Janssen, Chairman of Janssen Research Foundation shared the 1996 Australia Prize with three flu-busting Australians: Professor Mark von Itzstein of the Victorian College of Pharmacy; Dr Peter Colman, Chief of the CSIRO's Division of Biomolecular Engineering; and Dr Graeme Laver of the John Curtin School of Medical Research.

Between them, the four 1996 Australia Prize winners have made an enormous contribution to human welfare.

### 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.



http://sci.aaas.org/nextwave

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

### Special Advertising Supplement Career Opportunities for Scientists with Disabilities

Issue date: 14 June 1996 • Advertising space reservation deadline: 21 May

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.

### **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.

To advertise contact Janis Crowley Phone: (212) 496-7704; FAX: (202) 289-6742 http://www.aaas.org

### 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 On-line. 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.



### POSITIONS OPEN

#### POSTDOCTORAL RESEARCH ASSOCIATE Environmental Microbiology

Studying pollution control and bioremediation systems using molecular tools. Experience with molecular techniques, especially PCR and RT/PCR, very desirable. Knowledge of pollution control systems and analytical techniques also helpful. Available July 1, 1996. Send curriculum vitae and names of three references to: Dr. Charles Kulpa, Director, Center for Bioengineering and Pollution Control, 152A Fitzpatrick Hall, University of Notre Dame, Notre Dame, IN 46556. Email: biology.cbpc.1@nd.edu. The University of Notre Dame is an Equal Opportunity/Affinative Action Employer.

### POSTDOCTORAL POSITION Molecular Reproductive Physiology

A POSTDOCTORAL POSITION available for an outstanding Ph.D. to study steroid receptor gene regulation and function in the mammalian ovary using molecular biological approaches. A desirable candidate should be familiar with either reproductive physiology and/or molecular biology. Send a curriculum vitae along with the names of three references to: Dr. Ok-Kyong Park-Sarge, Department of Physiology, College of Medicine, University of Kentucky, Lexington, KY 40536-0084. Email: okp@seqanal.mi.uky.edu.

#### TUFTS MEDICAL SCHOOL Neuroscience

**POSTDOCTORAL** position: Available immediately to work on information processing in the olfactory system using molecular biological and physiological methods. Molecular biological experience required. Please send curriculum vitae and letters from three references to: John S. Kauer, Ph.D., Department of Neuroscience, Tufts Medical School, 136 Harrison Avenue, Boston, MA 02111. FAX: 617-636-0476. Tufts University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** is available immediately, with NIH funding, to study structure/activity relationships of salivary proteins when adsorbed to biological mineral. A Ph.D. in biochemistry or biophysics is required with experience in protein separation and characterization methods. Send, FAX, or Email curriculum vitae and three references to: Dr. John Featherstone, University of California San Francisco, Box 0758, 707 Parnassus Avenue, San Francisco, CA 94143-0758. Email: jdbf@itsa.ucsf.edu. FAX: 415-476-0858.

**POSTDOCTORAL POSITIONS** available to study genes that determine the yeast replicative life span, their human homologs and age-responsive promoter elements (*Genetica*, **91**:35, 1993; *J. Biol. Chem.*, **269**:15451, 1994; *J. Biol. Chem.*, **269**:18638, 1994). Experience in molecular techniques essential and in yeast genetics helpful. Send curriculum vitae with bibliography and names, telephone and FAX numbers of three references to: **Dr. S. Michal Jazwinski, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112.** *Affirmative Action/ Equal Opportunity Employer.* 

### POSTDOCTORAL POSITIONS

Two positions in Plant Biochemistry/Molecular Biology. One will study the biochemistry and cell biology of plant lipoxygenases in generating signaling molecules and in nitrogen storage. The second will examine the biochemical mechanism of nonsaturable sucrose uptake in plants. Knowledge of PCR mutagenesis, yeast genetics, structural biochemistry, and transport kinetics required.

Send a curriculum vitae and cover letter with statement of research interests, and arrange for three references to be sent to: Dr. Howard Grimes, Department of Genetics and Cell Biology, Washington State University, Pullman, WA 99164-4238. FAX: 509-335-3517; Email: grimes@wsu.edu. Equal Opportunity Employment/Affirmative Action/ADA Employer.

**POSTDOCTORAL POSITIONS** available immediately to study prokaryotic glycosyltransferases at the Sloan-Kettering Institute. Training in carbohydrate synthesis, membrane proteins, mechanistic enzymology, molecular biology, and/or antibody selection is particularly appropriate. Interested candidates should send curriculum vitae and the names of three references to: Dr. Jon S. Thorson (Box 428), Department of Biosynthetic Chemistry, Molecular Pharmacology and Therapeutics Program, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021.

### POSITIONS OPEN

#### MOLECULAR IMMUNOLOGY/ MICROBIOLOGY Postdoctoral Fellow Position

A POSTDOCTORAL FELLOW position is available for at least two years for NIH-funded studies on immunemodulated pathogenesis in a murine model of *Chlamydia pneumoniae* lung infection. A Ph.D. degree in immunology and molecular biology, sith emphasis on cellular immunology and molecular biology, is required. The minimum starting salary is \$25,000 plus benefits, dependent on qualifications. Send curriculum vitae, a brief summary of research experience and interests, and names of three references to: Dr. Bernhard Kaltenboeck, Department of Pathobiology, 270 Greene Hall, Auburn University, AL 36849-5519. Email: kaltebe@vetmed.auburn. edu. Review of applications will begin April 15, 1996, and will continue until the position is filled. *Auburn University is an Affinantive Action/Equal Opportunity Employer. Minorities and uvonen are enconraged to apply.* 

#### POSTDOCTORAL POSITION Glutamate Receptor Function in Developing Brain

Thomas Jefferson University has an immediate **POST-DOCTORAL POSITION** available to study glutamate receptor function and Ca<sup>2+</sup> signalling in developing neurons of the cerebellum. A Ph.D. and previous experience in neuronal signal transduction mechanisms, preparation and maintenance of primary neural cultures, and preferably fluorescence imaging required. Please send curriculum vitae, summary of research experience, and names and addresses of three references to: Dr. Thomas A. Rooney, Department of Pathology, Anatomy and Cell Biology, Thomas Jefferson University, 1020 Locust Street, Room 264 JAH, Philadelphia, PA 19107. Telephone: 215-955-2681; FAX: 215-923-2218; Email: rooneyt@jeflin.tju.edu. Smoke-free environment. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to study the roles of T cells/cytokines in immunity to Borrelia burgdorferi (see Jl, 154:1170; 155:2020) or Trypanosoma cruzi (Jl, 150:1446) in mouse models. Familarity with T cell methodology and experience with animal models is required. Background in molecular bi ology also helpful. Please respond by Email or send or FAX curriculum vitae and names and addresses of three references to: Dr. Steven P. Nickell, Department of Microbiology and Immunology, University of New Mexico School of Medicine, 915 Camino de Salud NE, Albuquerque, NM 87131. Telephone: 505-277-3344; FAX: 505-277-6029; Email: snickell@phnet. sph.jhu.edu.

**POSTDOCTORAL POSITION** in organic chemistry or biochemistry to study chemical and metal carcinogenesis. The successful candidate will synthesize carcinogen-nucleic acid adducts and undertake investigations into mechanisms of carcinogen-DNA adduct formation, including the analysis of carcinogen-DNA adducts generated both *in vitro* and in tissue culture systems. Background and experience in organic chemistry and biochemistry required. Send curriculum vitae and three letters of recommendation to: **Thomas Mechan, Depart**ment of Biopharmaceutical Sciences and Division of **Toxicology, Box 0446, University of California, San Francisco, CA 94143**.

**POSTDOCTORAL POSITION** available to study agonist activated ion channels and changes in intracellular calcium in megakaryocytes. Previous experience with patch clamp electrophysiological techniques and single cell fluorometry is highly desirable. Send curriculum vitae, a statement of research experience, and names, addresses, and telephone numbers of three references to: **Dr. Alan** Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030. FAX: 203-679-1269; Email: afein@neuron.uchc.edu.

Three **POSTDOCTORAL POSITIONS** available immediately to study 1) cutaneous basement membrane zone biology 2) cutaneous gene regulation and gene therapy, and 3) biology of microvascular endothelial cells. Experience in molecular biology and biochemistry preferred. Send curriculum vitae and names of three references to: **Drs. S. Herron, P. Khavari and P. Marinkovich, Stanford University School of Medicine, P204 MSLS, Stanford, CA 94305. FAX: 415-723-8762.** 

### POSITIONS OPEN

#### THE IRVINGTON INSTITUTE FOR IMMUNOLOGICAL RESEARCH Postdoctoral Fellowships in Immunology 1997 to 2000

The Irvington Institute for Immunological Research will award up to 12 POSTDOCTORAL FELLOW-SHIPS in Immunology for three consecutive years of work in a lab or a hospital in the United States. A laboratory may qualify for only one fellow per year. The fellowships will be awarded for basic immunological research. M.D.s, Ph.D.s, and M.D./Ph.D.s are encouraged to

M.D.s, Ph.D.s, and M.D./Ph.D.s are encouraged to apply. Candidates with not more than three years of laboratory experience will receive priority. The Irvington Institute does not have a citizenship requirement, however, applicants from abroad must first obtain sponsorship by a senior scientist in the U.S. before applying for an Irvington awad.

The Institute will pay a stipend of \$26,000, \$28,000, and \$30,000 for years one, two, and three, with an additional eight percent each year offered to help cover the cost of health insurance, travel, and supplies.

August 15, 1996 is the deadline for filing applications. The Institute will notify applicants in November 1996 on whether they have been selected to receive a fellowship to begin January 1 or July 1, 1996. Applications may be obtained by writing to: Mary Shaw, Fellowship Coordinator, The Irvington Institute for Immunological Research, 120 East 56th Street, Suite 340, New York, NY 10022 USA. FAX: 212-758-8968; Email: irving1@ ix.netcom.com.

#### POSTDOCTORAL POSITION Cellular Neurobiology

**POSTDOCTORAL POSITION** available immediately to investigate the function of transmembrane heparan sulfate proteoglycans in the developing nervous system. A broad range of cell biological, molecular, and biochemical techniques will be utilized. Experience with cell culture and molecular biology techniques (cloning, mammalian expression, site directed mutagenesis) and protein purification and characterization are desirable. Interested candidates should send a curriculum vitae, names of three references, and a brief summary of research experience to: **Geisinger Human Resources (DJC), 100 North Acade emy Avenue, Danville, PA 17822-1529**. *Equal Opportunity Employer. Minorities/Fenales/Disabled/Veterans.* 

#### POSTDOCTORAL FELLOWSHIP

The University of Medicine and Dentistry of New Jersey (UMDNJ)-Robert Wood Johnson Medical School, Department of Neuroscience and Cell Biology, announces a postdoctoral **FELLOWSHIP** available in molecular developmental neurobiology to study the neural and behavioral correlates of perinatal brain injury and the role of trophins. Requirements: Ph.D. in neuroscience or experimental psychology with emphasis on learning and memory mechanisms. Experience in behavioral testing of laboratory rats, rodent brain surgery, and neurohistology is desirable. Position to begin as soon as possible. Please submit a curriculum vitae, summary of scientific interests and goals, and three letters of reference to: Dr. Ira B. Black, Chairman, Department of Neuroscience and Cell Biology, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.

### POSTDOCTORAL POSITION Division of Molecular Neurobiology

RESEARCH FELLOWSHIP available to study molecular mechanisms underlying behavioral responses to amphetamine. Please send curriculum vitae, brief statement of experience and interests, and names of three references to: Neil Richtand, M.D., Ph.D., Director, Division of Molecular Neurobiology, University of Cincinnati, Department of Psychiatry, P.O. Box 670559, Cincinnati, OH 45267-0559. Email: richtanm@ucunix.san.uc.edu.

#### POSTDOCTORAL POSITION

NIH-funded position in Molecular Microbiology to study expression, function, and structure of bacterial multidrug resistance pumps. Competitive salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Kim Lewis, University of Maryland Medical School, 100 Penn Street, Room 440, Baltimore, MD 21201. Email: klewis@umabnet. ab.umd.edu. Wanted: Committed, ambitious scientist. Must be a team player with a vision for the future. M.D./Ph.D., Ph.D., M.S. or B.S. degree necessary.

### Does this describe you?

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies and institutions.

EDITORIAL SEMINAR: On the first day of the event from 11:00 - 11:30, a SCIENCE editor will conduct a seminar on "How to get a research paper published in SCIENCE."

### **1996 bioSCIENCE Career Fairs**

San Francisco, CA on the Stanford Campus in Palo Alto, May 3-4. May 3: 11am - 4pm; May 3 Seminar: 11 - 11:30am. May 4: 12 noon - 4pm.

**Just added! Careers in Biomedical Research:** Join leaders from both industry and academia for a panel discussion sponsored by the Biomedical Association of Stanford Students on May 3, 12 - 1:30 p.m. at the Fairchild Auditorium. The panel discussion focuses on careers in biomedical research.

La Jolla, CA at The Scripps Research Institute, October 4-5.



To pre-register, please submit your resume or CV via fax: (202) 289-6742, or via e-mail: bioscience@aaas.org. Please indicate to which bioSCIENCE Career Fairs you would like to have it distributed. Please remember to bring multiple copies of your CV or resume with you to the Career Fairs.

### For more information please call (202) 326-7018.

bioSCIENCE Career Fair Information On-line: http://www.aaas.org (Choose SCIENCE Classified Advertising from the menu)

### National Center for Human Genome Research and National Center for Biotechnology Information National Library of Medicine National Institutes of Health Public Health Service Computational Biology/Genome Informatics Fellowship Position

There is an opening for a joint appointment in the NIH Intramural Programs of the National Center for Human Genome Research (in the Laboratory of Cancer Genetics) and the National Center for Biotechnology Information (in the Computational Biology Branch) for a postdoctoral scientist interested in mathematical and statistical analysis in molecular biology, biological database design and analysis, and genome informatics. Applicants must have a Ph.D. or M.D. degree or equivalent, with less than 5 years of experience. Applicants need not necessarily be U.S. citizens. Stipends start at or above \$25,000 per year depending on experience. Applications will be accepted if postmarked by 5/31/96.

Candidates should send a curriculum vitae and the names, addresses, and telephone numbers of three references directly to: Chair, Search Committee

David Landsman, Ph.D. National Institutes of Health NLM/NCBI Building 38A, Room 8N807 Bethesda, MD 20894 U.S.A.

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

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From immunoassays and DNA probes to molecular biology and instrumentation, IDEXX is utilizing state-of-the-science technologies to aggressively and successfully target niche markets worldwide. Our powerful new generation of detection products is now used in applications ranging from animal health to food and environmental testing. With a phenomenal growth pattern behind us and a solid growth strategy ahead, we are seeking the following professional:

### Senior Technology and Business Development Analyst

Working closely with senior management as well as our scientific and marketing staff you will establish and review projects and priorities. The successful candidate will be responsible for leading the process of identification, analysis and triage of technology opportunities, culminating in the licensing of new technology platforms. In addition to technical evaluation, the process includes assessing potential markets, market research and making new product recommendations. You may be responsible for joint ventures and collaborative agreements as well as licensing opportunities. As a primary liaison with academic and research institutions, the incumbent will develop relationships with leading researchers in key fields.

The successful candidate will possess a broad educational background, culminating in a Ph.D. in a life or physical science. An MBA degree is desirable. 1-5 years' experience in a biotechnology or high-tech area, with experience in technology evaluation and licensing, market research, competitive analysis, contract negotiation, and strategic product planning. You must have excellent analytical skills with the ability to evaluate a breadth of technologies in numerous fields. You will thrive in a fast-paced, shortsleeved, entrepreneurial, proactive, team-oriented environment.

Salary commensurate with experience. Please send resume and a letter of application to: Ms. Donna Woodard, Recruiting Coordinator, IDEXX Laboratories, Inc., One IDEXX Drive, Westbrook, ME, 04092. An equal opportunity employer.



Organized by:

Fred Brown, USDA, Plum Island Animal Disease Center Dennis Burton, Scripps Research Institute Peter Doherty, St. Jude Children's Research Hospital John Mekalanos, Harvard University Erling Norrby, Karolinska Institute, Sweden

Topics & Invited Speakers include:

Bacterial Vaccines; John Tainer, Martin Blaser Parasite Vaccines; Lou Miller Viral Vaccines; Erling Norrby HIV-SIV; Joseph Sodroski DNA Immunization; Margaret Liu, Jerald Sadoff Immunogenic Structures; Marc Van Regenmortel, John Skehel Interaction of Antigens with the Immune System; Don Wiley, Luc Teyton Cytokines, Pathogenesis and Vaccines; Alan Sher, Ronald Germain Emerging Pathogens; C. J. Peters

CSHL particularly encourages junior scientists to present their data at the meeting. All oral and poster presentations will be selected on the basis of scientific merit.

Abstract Deadline: June 26, 1996

Other CSHL 1996 Fall Meetings Meeting Dates / Abstracts Due

Cancer Genetics & Tumor Suppressor Genes August 14 -18 / May 29 Molecular Genetics of Bacteria & Phages August 20 - 25 / June 5 Mouse Molecular Genetics August 28 - September 1 / June 12 Translational Control September 4 - 8 / June 19 Molecular Biology of Hepatitis B Viruses September 18 - 22 / July 3 Gene Therapy September 25 - 29 / July 10 Learning & Memory October 2 - 6 / July 17

**Cold Spring Harbor Laboratory** 

Meetings & Courses Office 1 Bungtown Rd, Cold Spring Harbor, NY 11724-2213 Email: meetings@cshl.org Fax: 516-367-8845 Phone: 516-367-8346 <u>http://www.cshl.org/meetings/</u>

### Nova Southeastern University Assistant/Associate Professor of Anatomy

The Anatomy Department of the College of Medical Sciences at Nova Southeastern University, Health Professions Division, is seeking an individual to teach human anatomy to students in the medical, optometry and allied health programs.

Nova Southeastern University is the largest independent university in Florida with an enrollment exceeding 14,000 students. NSU provides educational programs in the health professions, business, law and other fields. The Health Professions Division will soon move to new, state-ofthe-art facilities on the main campus of Nova Southeastern University.

Qualifications: An earned doctorate in Anatomy or equivalent degree, plus medical school level teaching experience in human anatomy.

Salary Range: \$40,000-\$45,000. Position to start July 1, 1996.

Please send letter of interest, resume, copy of transcript(s) and 3 letters of reference to:

Nova Southeastern University College of Medical Sciences Anatomy Department 1750 N.E. 167th Street N. Miami Beach, FL 33162-3017

### University of California, Davis School of Medicine

The Basic Science Departments of the School of Medicine invite applications for four full-time, tenure-track faculty positions at the Assistant Professor level. Applicants should have the Ph.D. and/or M.D. degree, and at least two years of postdoctoral experience. The most important criteria are: 1) a record of excellence in research which demonstrates strong potential for building an independent, competitive research program, and 2) communication skills demonstrating the potential to achieve excellence in the teaching of medical and graduate students. Research areas of interest include cell signaling, molecular recognition, structural biology, integrative biology, pathogenic mechanisms, and molecular pharmacology. Applicants should sub-mit: 1) a curriculum vitae (including teaching experience); 2) a synopsis of past, present, and future research goals; 3) up to three representative reprints; and 4) the names/addresses of four references to: Chair, Basic Sciences Search Committee, c/o Don Martensen, Office of the Dean, School of Medicine, East Health Sciences Drive, University of Califor-nia, Davis, CA 95616. These positions will be "Open Until Filled"; for full consideration, applications should be received by September 1, 1996, although applications will be accepted until December 31, 1996. For additional information see our web site at: http://medsponsoredprograms/pages/ SOMOR/rrecruit.html. The University of California is an Affirmative Action/Equal Opportunity Employer.

### **GLOBAL CAREER OPPORTUNITIES**



### EMBL MEETING ON TRANSCRIPTION

August 24-28, 1996 EMBL Heidelberg, Germany

Topics: Basal and Activated Transcription, Chromatin, Structure, Repression, Cell Cycle Organizers: René Bernards (Amsterdam), Michael Meisterernst (Munich), Francis Stewart (Heidelberg), Henk Stunnenberg (Heidelberg).

Invited speakers: Patrick Bauerle (San Francisco). Miguel Beato (Marburg), Peter Becker (Heidelberg), Stephen Burley (New York), Pierre Chambon (Illkirch), Victor Corces (Baltimore), Beverley Emerson (La Jolla), Ron Evans (La Jolla), Susan Gasser (Lausanne), Frank Grosveld (Rotterdam), Ingrid Grummt (Heidelberg), Nouria Hernandez (CSH), Alan Israel (Paris), Herbert Jackle (Göttingen), Steve Jackson (Cambridge), Roger Kornberg (Stanford), Tony Kouzarides (Cambridge), David

Livingstone (Boston), Bernhard Mach (Geneva), Kim Nasmyth (Vienna), Renato Paro (Heidelberg), Vincent Pirrotta (Geneva), Graig Petterson (Worcester), Danny Reinberg (Piscataway), Tim Richmond (Zurich), Robert Roeder (New York). Ueli Schibler (Geneva), Phil Sharp (Cambridge), Paul Sigler (New Haven), Kevin Struhl (Boston), Mark Timmers (Utrecht), Richard Treisman (London), Carl Wu (Bethesda), Alan Wolffe (Bethesda), Moshe Yaniv (Paris), Rick Young (Boston).

The deadline for applications is 15th June, 1996.

A limited number of speakers will be selected from the abstracts sent in. All accepted abstracts will be included in a booklet.

The total number of participants will be limited to 250.

**Registration fee: DM 800,-** (includes accommodation, local transport and meals). The registration fee should NOT be sent before acceptance to the conference. EU - elligible applicants 35 years or under, in particular Ph.D students,

can expect a partial refund. Application and abstract forms can be obtained from:

Maria Ittensohn, EMBL, Postfach 10.2209, 69012 Heidelberg, Germany.

Tel: +49-6221-387430; Fax: +49-6221-387575

e-mail: ittensohn@embl-heidelberg.de

electronic registration: http://www.embl-heidelberg.de/cgi/register-transcription

This meeting will be supported by CIBA-GEIGY Ltd., Basel, Switzerland

### Chemistry Faculty Position Forensic Science

Scientists with a background in forensic science are urged to apply for an assistant/associate professor opening in the Chemistry Department's Forensic Science program. A doctoral degree in chemistry or biochemistry is preferred; a doctoral degree in molecular biology or associated field will be considered. It is preferred that the faculty member have two years of crime laboratory experience as a forensic serologist; however, an indi-vidual with experience in DNA sequencing, site directed mutagenesis, PCR including but not limited to thermal cyclic sequencing, RFLP, and RAPD will be considered. The ideal candidate is expected to direct his/her current research experi-ence to the field of forensic science and to establish a well-funded research program dealing with the problems encountered by crime laboratory scientists in analyzing physical evidence collected from crime scenes. The faculty member will be responsible for developing the newly initiated Forensic Serology track in the Forensic Science curriculum. This will include recruitment and counseling of students, design and implementation of new courses in forensic serology, and working with state and local crime laboratories to develop a mutually acceptable training program for students and new employees. The faculty member may have some teaching duties with the Chemistry Department.

The University of Central Florida is a rapidly growing university with over 25,000 students in the expanding dynamic community of Orlando, Florida. Degree programs are offered at all levels. Applications and all supporting documents must be postmarked by May 16, 1996. Candidates should have letters of recommendation sent to: Dr. Glenn Cunningham, Chair, Department of Chemistry, Orlando, Florida 32816-2366. Review of candidates' applications will begin May 17, and interviews are expected to begin in May. The University of Central Florida is an equal opportunity, affirmative action employer and women and minorities are encouraged to apply.

### MEETINGS

### GLYCOCONJUGATES: CELLULAR MESSENGERS AND MEDIATORS

Hunter College of The City University of New York Center for Study of Gene Structure & Function sponsored by the National Institutes of Health Research Centers in Minority Institutions Program

MAY 3, 1996

9:00 a.m. to 5:30 p.m. Hunter College. West Building. Room 714 68th Street at Lexington Avenue. New York City

TIMOTHY A. SPRINGER, PH.D. JAMES C. PAULSON, PH.D. TEN FEIZI, M.D. SAMUEL J. DANISHEFSKY, PH.D. PETER N. LIPKE, PH.D.

ELAINE TUOMANEN, PH.D. PAMELA STANLEY, PH.D.

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Center for Study of Gene Structure & Function: Phone: (212) 772-5532/Fax: (212) 772-4109/ E-Mail: waxman@genectr.hunter.cuny.edu Check Out Our Symposium Web Page: http://sonhouse.hunter.cuny.edu/class/ csgsf sy.html

### **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「世界三極体制」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、その一極を担う。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。



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EMBL

The European Molecular Biology Laboratory (EMBL), an international research organization with its Headquarters Laboratory in Heidelberg (Germany), Outstations situated in Grenoble (France), Hamburg (Germany) and Hinxton (UK), and a Research Programme at Monterotondo (Italy) has the following vacancy in Heidelberg for a:

### COORDINATOR OF THE DEVELOPMENTAL BIOLOGY PROGRAMME

The EMBL has started a new Developmental Biology Programme in Heidelberg. The Programme is focused on pattern formation and morphogenesis in vertebrates and invertebrates using approaches that encompass genetics, cell biology, biochemistry and molecular biology. EMBL is well suited to research in Developmental Biology, because of its multidisciplinary scope, its strength in related areas, its highly collaborative environment and its tradition.

The new Programme will closely interact with and occupy new space adjacent to the Cell Regulation Programme which emphasizes signal transduction, cell cycle and differentiation. Strong links are also expected with the Cell Biology and Gene Expression Programmes. Additional interactions are possible with Cell Biophysics, Structural Biology and Biochemical Instrumentation, as well as with the new Programme of Mouse Genetics at Monterotondo.

The Developmental Biology Programme was started this year with three research groups working on *Drosophila* development (S. Cohen, A. Ephrussi, M. Mlodzik), formerly belonging to the Differentiation/Cell Regulation Programme. Three additional groups are to be established from early 1997 to mid-1998.

Applications are invited for the position of Coordinator of the new Programme. We are seeking active scientists with outstanding accomplishments who share our vision and collaborative outlook, and who are also skilled in personal interactions and resource management.

EMBL is an inclusive, equal opportunity organization.

Deadline for applications is 31 May 1996.

For further information please contact the Director General and Chair of the Search Committee, Professor Fotis C. Kafatos, e-mail: kafatos@emblheidelberg.de or FAX: +49-6221-387211.

To apply please send your CV and statement of research plans, quoting ref no. 96/17 to:

Head of Human Resources, EMBL, Postfach 10.2209, D-69012 Heidelberg, Germany.

Fax: +49 6221 387555



### Senior and Postdoctoral Research Positions

General: The International Livestock Research Institute (ILRI), founded in 1994, incorporates the resources of the former International Laboratory for Research on Animal Diseases (ILRAD, Kenya) and the International Livestock Centre for Africa (ILCA, Ethiopia). ILRI, a non-profit-making research institute, is sponsored by the Consultative Group on International Agricultural Research (CGIAR). The global mandate of ILRI is to undertake research to enhance the role of livestock in sustainable agricultural production systems in Africa, Asia and the Latin American/Caribbean region. Six programme areas address Conservation of Biodiversity, Production Systems Research, Utilization of Tropical Feed Resources, Animal Health Improvement, Livestock Policy Analysis and Strengthening National Agricultural Research Systems. ILRI employs approximately 80 internationally recruited scientists, 20 postdoctoral associates and 800 programme support staff based in the institute's two campuses in Nairobi, Kenya and Addis Ababa, Ethiopia and at field sites in Niger, Nigeria, Burkina Faso and Zimbabwe. In 1996 scientists will be posted in Asia and Latin America.

**Rumen microbiologist/ecologist:** Vacancy No. INT/008/96, Addis Ababa, Ethiopia. The project involves strategies for modifying antinutritional factors in forage trees and shrubs using a combination of classical anaerobic microbiology and modern molecular biotechnology and ecology techniques. We require a highly motivated, innovative scientist to join a multi-disciplinary team of scientists (including an animal nutritionist, a plant geneticist and a phytochemist) to perform research on detoxifying phytotoxins in ruminants by manipulating the rumen microbial ecosystem.

**Phytochemist:** Vacancy No. INT/009/96, Addis Ababa, Ethiopia. The project involves characterizing and quantifying antinutritional factors in forage trees and shrubs using modern analytical techniques and investigating the mechanisms responsible for microbial transformation of these factors by rumen microbes. We require a highly motivated, innovative scientist to join a multi-disciplinary team of scientists (including an animal nutritionist, a plant geneticist and a rumen microbiologist/ecologist) to perform research on the chemical nature and factors influencing phytotoxins in indigenous plants and to examine their bioconversion in the rumen microbial ecosystem.

**Qualifications:** For both the above positions a Ph.D. or equivalent with applicable specialization and a proven publication record in the field is required. Candidates are expected to have a minimum of 10 years of relevant research experience. Experience in ruminant nutrition/physiology and/or nutritional factors is desirable. Candidates must be experienced in managing a microbiological or analytical laboratory and have a proven ability to design, implement, analyze and evaluate experimental data. They must have good communication and interpersonal skills, ability to perform in a multi-disciplinary and multi-cultural research environment and be fluent in spoken and written English. Possession of other language skills and working experience in developing countries will be an advantage.

**Postdoctoral cellular immunologist:** Vacancy No. INT/010/96, Nairobi, Kenya. The project uses a multi-disciplinary approach to develop improved vaccines against parasite diseases that contain livestock productivity in developing countries. The successful candidate will focus on evaluating the vaccine potential of antigens of *Theileria parva* that access bovine class I MHC antigen processing pathways. Studies will be based on recombinant viruses and transfection techniques in association with a variety of cellular immune assays. Applicants should hold a Ph.D. degree in cellular immunology, preferably as applied to ruminants. Experience in virology and the use of mammalian expression systems will be an advantage.

**Conditions:** The initial contract for the two senior positions will be for three years and may be renewed. The postdoctoral position will be for a three year fixed term. Salaries are paid in US dollars. ILRI provides excellent benefits including employer-paid medical, life and disability insurances and retirement benefits. Relocation, housing, annual leave travel and education allowances are also provided. On-site accommodation in fully furnished houses is subject to availability.

Applications: Applicants should send a cover letter, resume, and the names and addresses (including telephone, fax and e-mail) of three referees who are knowledgeable about the candidate's professional qualifications to ILRI, P.O. Box 30709, Nairobi, Kenya; telephone: 254 2 630743; fax: 254 2 631499; e-mail: r.eley@cgnet.com. The name and reference number of the position for which the application is made should be clearly marked on the envelopes of mailed, or on the head of faxed or e-mail, applications. Review of applications will begin 3 May, 1996.

ILRI is an Equal Opportunity Employer

### Ludwig-Maximilian-University Munich

### **Chair of Physiology**

The Faculty of Medicine of the Ludwig-Maximilian-University, Munich, invites applications for the C hair of Vegetative Physiology (C4, successor to Professor E. Gerlach).

The successful applicant will be a university graduate with senior qualifications equivalent to the German "Habilitation" and have proven expertise in research and teaching.

The University of Munich is endeavouring to increase the proportion of women on its scientific staff.

Applications with the usual documentation (academic qualifications, names of referees, curriculum vitae and list of publications subdivided into original articles, reviews, book articles and abstracts) should reach the **Dean's Office, Faculty of Medicine, Bavariaring 19, D-80336 Munich**, no later than 26.04.1996.

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### ETH Zürich Team Leader Position Organic Thin Films for Nonlinear Optics

Our team in the nonlinear optics laboratory is growing thin films by Organic Molecular Beam Epitaxy (OMBE) in UHV surroundings and participates in a four-year Swiss priority program ("Growth and Engineering of Nonlinear Optical and Electrooptic Thin Films by Molecular Layer Deposition"). The candidate should be interested in leading a small team working in an interdisciplinary field at the border between physics, chemistry and materials science. The candidate and his or her team will conduct research in the field of preparation, characterization and investigation of or-ganic nonlinear optical thin films. Excellent facilities (two MBE Deposition Chambers, all necessary analytical methods, clean rooms, nonlinear optics and laser laboratory) are available for the execution of the program.

The candidate is expected to have a Ph.D. in physics in the field of molecular beam epitaxy. Experience in organic molecular beam epitaxy or organic self-assembly would be preferred. A readiness to cooperate with chemists and technicians within MBE group is required.

Interested persons are asked to send a resume, transcripts and two references.

Apply to: **Prof. Dr. P. Günter Nonlinear Optics Laboratory Institute of Quantum Electronics ETH Hönggerberg HPF E7 CH-8093 Zürich** 

### UNIVERSITY OF CANTERBURY NEW ZEALAND LECTURER IN ZOOLOGY (AQUATIC ECOLOGY)

Applications are invited for the above tenured position in the Department of Zoology. The minimum qualification on appointment is the Ph.D. degree or equivalent; postdoctoral experience is preferable. The appointee can expect to contribute to the teaching of marine invertebrate zoology, aquatic ecology and general zoology at undergraduate level, and to teach a postgraduate course or courses in their area of specialisation. He or she will be required to develop an active programme of research and to supervise research students. Preference may be given to candidates with strengths in biometrics and experimental ecology, and interests in the broader fields of environmental science or conservation biology

Academic enquiries may be directed to the Head of Department, Professor M J Winterbourn, Telephone 64-3-364-2026, Fax 64-3-364-2024, or Email: <job@zool.canterbury.ac.nz >.

The University's World Wide Web address is <http://www.regy.canterbury.ac.nz/home.html>. The salary for Lecturers is on a scale from NZ\$42,000 to NZ\$52,000 per annum. Applications close on 30 June 1996. Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting Position No. ZO95. must be addressed to:

The Registrar, Attention Staffing, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.

The University has a policy of equality of opportunity in employment.

### Kuwait University Faculty of Science

The Faculty of Science at Kuwait University seeks a qualified candidate in Plant Taxonomy (flowering plants) with a strong commitment to high quality teaching and research, for appointment to the position of Professor or Associate Professor.

Required qualifications:

- Ph.D. or its equivalent in the required area.
- Research experience and publications
- University teaching experience
- Excellent knowledge of English
- Excellent knowledge of herbarium technologies and administration

The post will offer opportunity to manage the Herbarium of Kuwait University (KTUH). A new building for the Herbarium is available with excellent set of classified records of flora of the Arabian Peninsula.

Kuwait University offers:

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Approximate salary ranges: Professor - KD 1070-1230, and Associate Professor - KD 875-1035, depending on years of experience and number of dependents (spouse and children under 18). [1 KD is equivalent to approx. 3.5 US\$].

- Fringe benefits which include: furnished air-conditioned accommodation, annual air tickets, free National Health Medical Care, paid mid-term holidays and summer vacations, and gratuity.
- New appointees can apply for financial support for research projects.
- Excellent academic environment.
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- Names and addresses of three persons well-acquainted with the academic and professional work of the applicant.
- An English translation of all documents in other languages.
- Passport photocopies of self and accompanying dependents, including pages containing photograph, personal data, other persons on the same passport, place of issue, dates of issue and expiry.
- For the appointment to the offered positions, a very good performance in the B.Sc. is required (minimum GPA 3 points out of 4). Please send copies of all transcripts.

Applications are available from the Kuwait University Office, 3500 International Drive N.W., Washington, D.C. 20008, Tel. (202) 363-8055.

Applications should be sent by express mail/courier service to:

The Dean, Faculty Science Kuwait University P.O. Box 5969 Safat 13060 Kuwait For inquiries, use:

Fax: (965) 4847054 or (865) 4836127

E-mail: azza@kuco1.kuniv.edu.kw.

Closing date for receipt of applications: 30 April, 1996

### Oxidative Stress and Redox Regulation: Cellular Signaling, Aids, Cancer and Other Diseases.

Co-chairs: Luc MONTAGNIER-Catherine PASQUIER-Thomas TURSZ

May 21-24, 1996 Institut Pasteur, Paris, France

Organizers: Luc MONTAGNIER, René OLIVIER, Lester PACKER, Catherine PASQUIER, Jöelle WIELS, Junji YODOI

Oxidation/reduction of Redox status plays a crucial role both in the regulation of signal transduction and defense mechanisms against oxidative stress. Recently there has been an unprecedented expansion of our knowledge on the part which oxidative stress and redox regulation play in signal transduction, gene regulation, cell growth/differentiation, and cell death. The new knowledge in these areas promises to open up new paradigm of how cellular redox status may exert control over various diseases. In a forthcoming international meeting for "Oxidative Stress and Regulation Redox: Cellular Signaling, Aids, Cancer and Other Diseases" scheduled for May 21–24, 1996 (Monday through Friday) at the Institut Pasteur in Paris, the following topics will be explored:

-Basic biology of redox regulation and oxidative stress

-Role of oxidative stress and antioxidants on cellular signaling and gene regulation

-Activation of protein-kinase.

-Activation of nuclear factors.

-Regulation of cell growth, differentiation and death in different cellular models.

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—Cancer. —Other diseases.

Registration fees: 2200 FF (500\$).

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### National University of Singapore Postdoctoral Position

The **Department of Pharmacy** seeks applications for Research Fellow positions in (1) Organic Chemistry and (2) Pharmacology. The successful candidates will work as part of a team, investigating novel neuroactive compounds. Organic chemists will be involved in chemical synthesis. Preference will be given to those with experience in natural product synthesis, physiochemical determinations or working knowledge in molecular modelling. The pharmacologist will be involved in pharmacological testing. Experience in receptor binding and animal experiments will be an advantage.

The appointments will normally be for a period of one year in the first instance with the possibility of extension up to a maximum of three years. The salary ranges from \$47,670to \$90,740 per annum; the amount offered will depend on the qualifications and experience of the candidate (US\$1 = \$\$1.4). Leave and medical benefits will be provided.

To apply, send application with detailed curriculum vitae and names of three referees to:

Assoc. Professor T. L. Ngiam Department of Pharmacy Faculty of Science NATIONAL UNIVERSITY OF SINGAPORE 10 Kent Ridge Crescent, Singapore 119260 Fax: (65) 779-1554 Internet: phahead@leonis.nus.sg. Closing Date: 30 April 1996

## Dr.Reddy's

### RESEARCH FOUNDATION

**Dr. Reddy's Research Foundation** (DRF), promoted by the pioneering pharmaceutical companies of Dr. Reddy's Group, Hyderabad, India, has been established with the aim of building a solid foundation in pharmaceutical research. For this purpose we have commissioned a state-of-the-art research facility at Miyapur, Hyderabad, India. We are seeking the following personnel for Biotechnology R&D and Chemical R&D. The successful candidates will have distinguished reputation and established records of independent research experience.

**MICROBIAL GENETICIST -** Ph.D. in Microbiology/Molecular Biology with 3 years of Postdoctoral experience in the field of recombinant DNA research. You will be responsible for introducing state-of-the-art methods in developing and screening of strains for higher production of secondary metabolites. Work experience in the areas of microbial techniques, microbial physiology, biochemistry, classical strain development by mutation, and gene cloning is essential.

**FERMENTATION TECHNOLOGIST** - The individual would be a specialist in microbial fermentation. Experience in optimization of media and environmental conditions to enhance the production of microbial metabolites and scale-up of fermentation process from shake-flask to plant scale is expected. Successful candidate will have a Ph.D. in Microbiology/ Biochemical Engineering with 3 years of Postdoctoral experience or M.Sc. with 10 years of industrial experience in process development and trouble shooting of fermentation processes.

SCIENTISTS (MEDICINAL CHEMISTRY) - Candidates should have exceptional academic training and a Ph.D. degree in Medicinal Chemistry. Scientists are expected to play a key role in the design, synthesis and follow up of small molecule biological affectors as members of a multi-disciplinary project team pursuing mechanism based approach to novel pharmaceutical agents. DRF maintains a strong interest in important therapeutic areas including antibacterials, anticancer, cardiovascular, metabolic disorders and other exploratory areas of medicinal chemistry.

**SCIENTISTS (ORGANIC CHEMISTRY)** - Candidate with Ph.D. in Organic Chemistry to develop and execute methods for the simultaneous synthesis of tens to hundreds of new chemical entities for the optimization of drug lead in different therapeutic areas. The candidates should have excellent knowledge of synthetic methodology and organic reaction mechanisms and experience in the synthesis of heterocyclic small molecules. The ability to interact in a multi-disciplinary project team environment is essential.

Salaries and benefits will be tailored to attract the best talent.

NRI scientists wishing to return to India, may please respond with complete details of CV, in strict confidence, to:

The President Dr. Reddy's Research Foundation 7-1-27, Ameerpet, Hyderabad 500 016, INDIA Fax: +91 40-285438/291955 E-mail: res.drf@axcess.net.in

### POSITIONS OPEN

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS Hemostasis and Thrombosis

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS in Hemostasis and Thrombosis are available at the University of Vermont. M.D. and Ph.D. candidates will be considered for a minimum of two years of support. The training programs include clinical epidemiology, enzymology, protein chemistry, molecular biology, cell biology, and vascular biology of the coagulation and thrombolytic systems. The Vermont Thrombosis Center provides the foundation for cooperative interchange among the research laboratories of the seven preceptors in the program: Dr. Edwin Bovill and Dr. Russell Tracy, Department of Pathology; Dr. George Long, Dr. Kenneth Mann, Dr. Paula Tracy and Dr. Burton Sobel, Department of Medicine. The primary training enterprise will occur within the research laboratory environment but this may be supplemented with the formal educational programs available in the University of Vermont College of Medicine. Send curriculum vitae, selected papers, and names of three references to: Dr. Kenneth G. Mann, Ph.D., Professor and Chairman, Department of Biochemistry, University of Vermont College of Medicine, C401 Given Building, Burlington, VT 05405-0068.

Immediate opening for an energetic and technically accomplished **POSTDOCTORAL RESEARCH AS**-**SOCIATE** in protein chemistry and molecular biology to work on the characterization of a newly identified binding site for blood coagulation factor IX. A knowledge of cell biology and endothelial cells would be a plus but is not necessary. Send curriculum vitae, a short summary of research interests, and addresses of three references to: **Darrel W. Stafford, Ph.D., Biology Department, University of North Carolina–Chapel Hill, Chapel Hill, NC 27599-3280.** 

> STATE OF WASHINGTON Ambient Monitoring Program Science Coordinator

Puget Sound Water Quality Authority, Olympia, Washington, seeks applicants for Puget Sound Ambient Monitoring Program SCIENCE COORDINATOR Interdisciplinary and inter-program ambient monitoring science advocate, interpreter, representative, and convener for nationally recognized program. Master's or Ph.D. Experience facilitating interdisciplinary science teams and conducting environmental sampling or monitoring. \$42,000 to \$53,100 plus benefits. Telephone: 360-407-7300 for application materials. Applications due May 8, 1996. Washington is an Equal Opportunity Employer and values workplace diversity.

ASSISTANT RESEARCH SCIENTIST to direct the biomedical engineering aspects of a neurosurgical auditory research program. Doctoral degree in biomedical engineering and experience in medical device research and development as well as research experience with auditory systems required. Experience with LabView preferred. Send résumé to: Surgery Personnel, 1573 JCP, University of Iowa Hospitals and Clinics, 200 Hawkins Drive, Iowa City, IA 52242-1086. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Wonen and minorities are strongly encouraged to apply.



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Continued from page 161



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