# **FREE SAMPLE COPIES AVAILABLE** of these and many other journals...

New North American Editor!

**PHYSIOLOGY & BEHAVIOR** 

An International Journal

North American Editor: Susan S. Schiffman, Duke University Medical Center, USA European Editor: Barry J. Everitt, University of Cambridge, England

Featuring new North American and European Editors, **Physiology & Behavior** covers original research results which integrate anatomy, biochemistry, endocrinology, pharmacology and neurobiology within a behavioral framework.

> ISSN: 0031-9384 Volumes 57-58, 1995 12 issues per annum Associated Personal Rate \$217.00 Institutional Rate \$1498.00

## ADVANCES IN NEUROIMMUNOLOGY

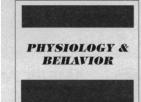
Editors: George B. Stefano, State University of New York College at Old Westbury, USA and Eric M. Smith,

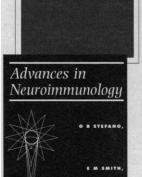
University of Texas Medical Branch, USA

The only review journal of its kind, **Advances in Neuroimmunology** publishes current and comprehensive reviews on significant research into the interactions between the nervous and immune systems.

> ISSN: 0960-5428 Volume 5, 1995 4 issues per annum Institutional Rate \$321.00

Request a free sample copy or stop by the Elsevier booths (#1601-1606) at the Society for Neuroscience to see these and other titles from *the* neuroscience publisher... ELSEVIER SCIENCE





BRAIN RESEARCH

BULLETIN

CELL TRANSPLANTATION

> Editor-in-Chief: Paul R. Sanberg

New Editor-in-Chief! New Sections!

## BRAIN RESEARCH BULLETIN

*Editor-in-Chief:* Stephen B. Dunnett, University of Cambridge, England

**Brain Research Bulletin** is committed to the rapid publication (10 weeks) of a broad spectrum of articles in the neurosciences. Distinguished by the excellence of its reports and superior reproduction of photomicrographs and other illustrations, the journal covers all aspects of brain research.

> ISSN: 0361-9230 Volumes 36-38, 1995 18 issues per annum Associated Personal Rate \$282.00 Institutional Rate \$1528.00

## **CELL TRANSPLANTATION**

Official Journal of the Cell Transplant Society

*Editor-in-Chief:* Paul Sanberg, University of South Florida College of Medicine, USA

**Cell Transplantation** publishes articles dealing with a wide range of topics, including neuroscience; methods and new technologies; tissue engineering and bioartificial organs; islets and other endocrines; hematopoietic system; blood vessels, skin, and other tissues; bone, cartilage, and muscle.

ISSN: 0963-6897 Volume 4, 1995 6 issues per annum Associated Personal Rate \$93.00 Institutional Rate \$351.00

Please send me a free sample copy of the following title(s):Advances in NeuroimmunologyBrain Research BulletinCell TransplantationPhysiology & Behavior

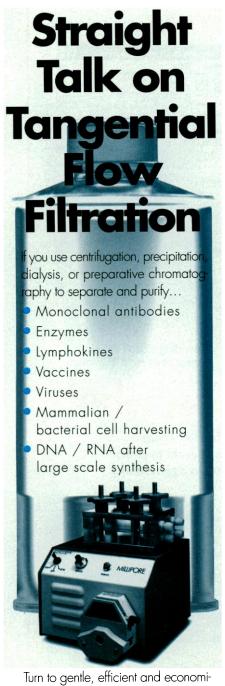
Name/Organization/Department

Address

Return to: PERGAMON An imprint of Elsevier Science A41565 US: 660 White Plains Road, Tarrytown, NY 10591-5153. Fax: (914) 333-2444. UK: The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB. Fax: +44 (0)865 843986.



Circle No. 38 on Readers' Service Card



Turn to gentle, efficient and economical Tangential Flow Filtration systems for *improved recoveries and processing times* for concentration, clarification and diafiltration applications.

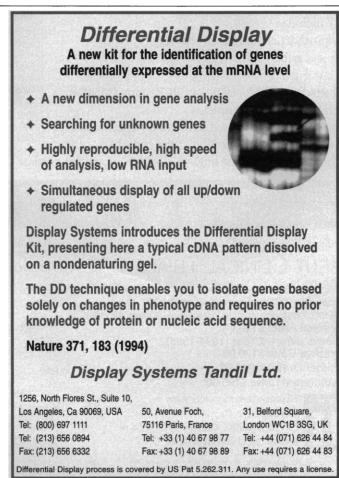
Free Offer! In U.S. and Canada call 1-800-MILLIPORE and participate in our Tangential Flow Filtration survey. Give us the straight scoop on your system requirements and we'll send you a free sample pack of disc Ultrafilters.

Internet Lab Catalogue: Access URL Menu; type:http://www.millipore.com



14				0	2
$^{\prime \prime \prime }C$ M	<b>EVALONOLA</b>	CTO	NE	S	$^{3}H$
ISOPRENOIDS 50% OFF*					
CAT #	PRODUCT DESCRIPTION	QTY	AMSM	DPNT	ARC
ARC-797	Dimethylallyl-PP, [1-14C]	5μCi	\$	\$	\$649
ART-362	Dimethylallyl-PP,[1- <sup>3</sup> H]	50µCi			599
ARC-620	Farnesyl-PP, [1,2-14C]	5μCi			649
<b>ARCD-101</b>	Farnesyl-PP, "cold"	100μg			109
ART-324	Farnesyl-PP, [1- <sup>3</sup> H]	250µČi	655	725	327
<b>ARCD-102</b>	Geranylgeranyl-PP, "cold"	100µg			109
	Geranylgeranyl-PP, [1- <sup>3</sup> H]	250µČi		704	352
ARC-541	Isopentenyl-PP, [1- <sup>14</sup> C]	50µCi	970		452
<b>ARCD-104</b>	Isopentenyl-PP, "cold"	100μg			109
ART-377	Isopentenyl-PP, [1- <sup>3</sup> H]	50µČi			469
ART-427	Mevalonic acid, R-[5- <sup>3</sup> H]	1mCi		950	475
ARC-702	Mevalonic acid, R-5-P, [2-14C]	10µCi			649
ARCD-113	Mevalonic acid-R-5-P, "cold"	100μg			329
ART-406	Mevalonic acid, R-5-P, [5- <sup>3</sup> H]	50µĈi			1049
ARC-522	Mevalonic acid, RS-[2- <sup>14</sup> C]	50µCi		310	140
ART-334	Mevalonic acid, RS-[5-3H]	1mCi		1061	530
ART-438	Mevalonolactone, R-[5- <sup>3</sup> H]	250µCi			359
ARC-452	Mevalonolactone, RS-[2-14C]	50µCi	375	342	170
ART-315	Mevalonolactone, RS-[5-3H]	5mCi		1539	769
<b>ARCD-111</b>		100μg			109
ART-404	Solanesyl-PP, [1- <sup>3</sup> H]	50µČi			499
ARC-540	Squalene, [ <sup>14</sup> C]	1 <sup>'</sup> µCi			319
ART-355	Squalene, [ <sup>3</sup> H]	50μCi		1281	640
*Amersham (AMSM) & Complete Satisfaction or 100%					
DuPont's (DPNT) 1994 List Prices Money Back Guarantee					
AMERICAN RADIOLABELED CHEMICALS, INC.					
11624 Bowling Green Drive, St. Louis, MO 63146					
Phone: (314)991-4545 or (800)331-6661					
Fax: (314)991-4692 or (800)999-9925					

Circle No. 54 on Readers' Service Card



Circle No. 84 on Readers' Service Card



Circle No. 3 on Readers' Service Card

# Fast. Uniform. Very Cool.

The Penguin Water Cooled Dual Gel Systems for Vertical Electrophoresis.

> Fast, high resolution results Easy, Leak-proof assembly Durability that lasts

> > stated which which down which which

Picture Perfect Gel Run on Penguin Model P9DS

Number of gels run: 2 Gel Size: 14 x 16 cm Total Run Time: 85 minutes

Specs: Sample: 1 µg protein standard/well Current: Constant, 120mA Gel Thickness: 1.5 mm Gel Percentage: 12% separating, 4% stacking Average Buffer Temperature: 17°

For more information, call Owl at: 800/242-5560

**Owl Scientific, Inc.** 10 Commerce Way Woburn, MA 01801 USA

Circle No. 50 on Readers' Service Card

# The Power of a Porsche.

& Sun

Mapping the human genome.<sup>1</sup> Studying prehistoric DNA.<sup>2</sup> Characterizing the transmission of infectious diseases.<sup>3</sup> These and other scientific innovations were once just ideas – implemented with traditional electrophoresis and a Bio Image Analysis System.

The new Bio Image Intelligent Quantifier<sup>™</sup> Gel Scanner lets you analyze a wide range of gels and membranes quickly and easily. The key is the IQ system's powerful yet easy-to-use software from Bio Image, a menu-driven, windowed program designed with the features that have made Bio Image systems the choice of scientists. The Intelligent Quantifier comes with a comprehensive software environment supporting whole band 1-D analysis, 2-D electrophoresis, blot analysis, and colony / plaque counting.

# The Value of a VW.

The IQ Gel Scanner, including powerful computer, 1200 dpi scanner and Bio Image software, costs less than \$20,000. No other image analysis system gives you this much at such a low price.

## Take it for a test drive.

Special offer! Try a Bio Image IQ Gel Scanner in your own laboratory and start turning your ideas into real, tangible results. Just call us to arrange a FREE trial at 1-800-BIO-IMAGE. (Outside the U.S., call 1-313-930-9900.)

Daniel Cohen et al., Cell, 70:1059-1068.
 Raul Cano, Genetic Engineering News, June 1, 1993
 Peter Small, et.al., New England Journal of Medicine, 330: 1703-1709

IQ Analysis Software from Bio Image

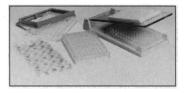
- Self-installing and self-tutoring No training needed.
- Annotate and compare images, prepare reports without leaving your keyboard.
- Network ready Combine gels and compare data from multiple sources.



Circle No. 55 on Readers' Service Card

## mRNA Isolation Systems

The PolyATtract Series 9600 mRNA Isolation Systems allow the simultaneous isolation of polyadenylated mRNA from up to 96 tissue extracts or cell lysates in less than 2 hours. The systems combine Promega's PolyATtract technology, high capacity MagneSphere Streptavidin-coated paramagnetic particles, and a biotinylated oligo(dT) probe in a convenient 96-well plate format. The systems provide an efficient means to isolate amplification quality mRNA for developmental and tissue-specific screening and other purposes from milli-



gram quantities of plant or animal tissues or less than 10<sup>5</sup> cells per sample. **Promega. Circle 141.** 



## Ethidium Bromide Remover

A new, inexpensive filtration system rapidly removes the potent mutagen ethidium bromide from gel staining solutions. The Extractor device, a limited reuse disposable, removes >99% of the ethidium bromide from 1 liter of electrophoretic buffer in about 1 min. After filtration, the decontaminated solution can be poured down the drain, according to the manufacturer. The one-step procedure decontaminates for less than \$1 per liter. Schleicher and Schuell. Circle 142.

## Chemiluminescent Protein Assay

The Immun-Lite assay for chemiluminescent detection of membrane-bound proteins is an alternative to radioactive probes. It is an alkaline-phosphatase-based system designed for protein immmunoblotting detection. A unique light-emitting substrate allows the signal to be imaged on x-ray film. Kits are available for use with any type of blotting membrane. Rapid exposure times, stable light emissions, and hardcopy results are some of the advantages of the system. **Bio-Rad** Laboratories. Circle 143.

## **PCR Purification Kits**

**QIAquick PCR Purification Kits** are for purification of DNA products directly from polymerase chain reactions (PCR). The kit provides a fast and reliable silica membrane-based microspin procedure: simply adsorb fragments to the QIAquick membrane, wash away impurities, and elute pure DNA in 5 min. Removal of mineral oil is not necessary, and there is no phenol extraction, ethanol precipitation, or pipetting of slurries or resins. The purified DNA is ready for use in sequencing, restriction, ligation, and transformation. The kit eliminates 99.5% of contaminating reaction components, such as primers, enzymes, and unincorporated nucleotides. Qiagen. Circle 144.

## **Image Analysis System**

The C-Imaging 1280 system can capture images at up to 1024 by 1024 resolution in 24-bit color and from 8- to 16-bit depth in monochrome. Multiple cameras can be connected simultaneously, including high resolution analog, RS-422 digital, monochrome, and color with software switching. Other input devices include cooled charge-coupled devices, scanning electron microscopes, videocassette recorders, and confocal microscopes. Images are displayed noninterlaced at 1280 by 1024 resolution for uninterrupted



viewing with rapid zoom and roam capability for examination of details. Applications include in situ hybridization using grain counting techniques, quantitative autoradiography, cell counting and morphology analysis, fluorescence in situ hybridization, three-dimensional reconstruction and montage, and much more. Compix Inc., Imaging Systems. Circle 145.

## DNA Purification System

The Wizard Series 9600 DNA Purification System can purify plasmid DNA from up to 96 cultures in less than 90 min. The integrated system features a highperformance vacuum manifold and novel racks for efficient isolation from as few as 8 or as many as 96 samples simultaneously without wasting plastics or reagents. Cleared alkaline lysates are transferred to Octocolumn Racks in the vacuum manifold. A resin is added to the columns, and vacuum is applied to wash and dry the samples. A standard 96-well plate is then placed into the manifold and the DNA is eluted by vacuum from the racks into the plate in small volumes of water or buffer. Plasmid vields are highly reproducible from well to well without detectable cross-contamination. DNA prepared with the system is ready to use in a variety of molecular biology applications such as sequencing, restriction digestion, and in vitro transcription without further purification. Promega. Circle 146.

SCIENCE • VOL. 266 • 11 NOVEMBER 1994

## Carbohydrate Sequencer

The RAAM 2000 GlycoSequencer features a new fluorescent labeling system. Labeling glycans with a fluorescent dye instead of tritium simplifies and speeds sample preparation and enhances sensitivity. As little as 50 pmol of N-linked oligosaccharide can be completely sequenced in 2 days with only a few hours of hands-on time. The instrument completes a product family for carbohydrate sequencing that includes the GlycoPrep 1000 for automating the release and recovery of glycans from as little as 10 µg of glycoprotein, the Signal Labeling Kit for fluorescently labeling glycans, and the GlycoSep Column Set, a high-performance liquid chromatography column set for one- or two-dimensional, high-resolution, high-speed profiling and fractionation of labeled glycan pools. Oxford Glyco-Systems. Circle 147.

## Literature

Nucleic acid labelling and detection products—the informed choice is a catalog that includes a guide for choosing the most appropriate method for applications such as post-polymerase chain reaction analysis, genomic Southern (DNA) blotting, and low abundance Northern (RNA) blotting. Amersham Life Science. Circle 148.

The Pipette Puller describes an instrument designed to meet all multibarrel pipette, patch, extracellular electrode, injection, and holding pipette needs. Innovative and flexible, this compact puller offers linear bearing and advanced sensor technology, a threeaxis coil positioning system, and dual heat controls. ASI Instruments. Circle 149.

PolyScience Constant Temperature Equipment describes a complete line of refrigerated and heating circulators, recirculators, and chillers. PolyScience. Circle 150.

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

places - - when you -

can do it <

in several

right

Incubate, filter, precipitate, immobilize, harvestand detect directly in the MultiScreen assay plate. Compared to conventional methods, its 96 discrete filter tubes reduce reagent usage by 50–90%, and radioactive waste by >95%. Compatibility with direct microplate scintillation counters dramatically improves throughput.

Why do

MultiScreen handles every assay step. Its patented underdrain assures reliable, multiple incubations. To remove supernatant, just apply vacuum to wash or quantitatively collect filtrate. Easily transfer filters directly into vials for radiodetection. Whether you're doing receptor binding, second messenger studies, cell culture and proliferation or immunoassays, MultiScreen has been proven faster, simpler, and more efficient.

Let Millipore's Technical Service help you choose the optimum membrane or filter for your assay—glass fiber, cellulosic or charged membranes, Immobilon<sup>™</sup> series, low-binding Durapore<sup>®</sup> and more.

MILLIPORE

## The MultiScreen® Assay System. The Integral Approach to Bioassays.

Call or fax for a complete technical package or to arrange a demo. •U.S. and Canada: 1-800-645-5476 • Japan: (03) 3474-9111 • European headquarters in Paris, fax: 33.1.30.12.71.83 Internet Lab Catalogue: access URL menu, type: http://www.millipore.com

re.

# Think of us as your research foundation.

When you're probing or recording at the singlecell level, there's no room for error, or vibration.

Our patented Gimbal Piston<sup>®</sup> Air Isolator System effectively eliminates both vertical and horizontal floor vibration. When it's combined with our unique, highly damped, stainless steel laminate tops or steel honeycomb, spillproof CleanTop<sup>®</sup>, you are assured of unequalled performance.

That's why leading researchers worldwide specify TMC vibration isolation systems: laboratory tables, optical tables, table-top



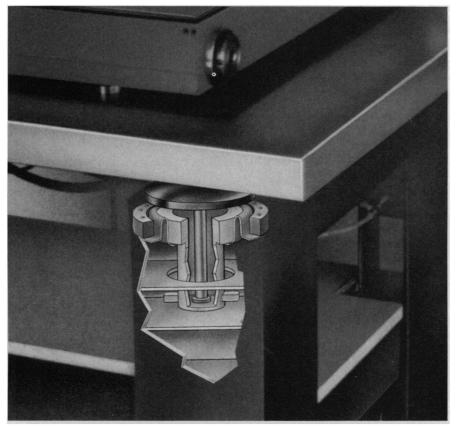
and floor platforms. Each component of these precision systems is designed to assure the most effective vibration protection possible for your most critical applications.

For support you can count on, move up to TMC vibration isolation systems. Contact our Technical Sales Group today.

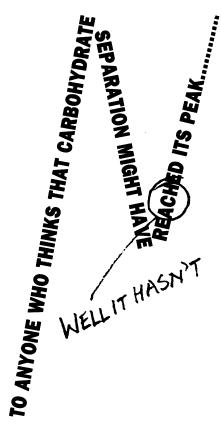


15 Centennial Drive • Peabody, MA 01960, USA Tel: 508-532-6330 • 800-542-9725 Fax: 508-531-8682

## Vibration Solutions



Circle No. 14 on Readers' Service Card



Signal™ fluorescent labelling and GlycoSep™ HPLC columns allow cost-effective, quantitative and preparative profiling of charged and neutral glycans.

## Signal™ Fluorescent Labelling

Signal<sup>™</sup> is a simple, convenient method of fluorescent labelling a glycan pool. The technique utilizes 2-aminobenzamide (2-AB) in a validated, 2 step procedure that labels glycans efficiently (>85%) and non-selectively at the reducing terminus.

## GlycoSep™ High Resolution Glycan Profiling

GlycoSep™ is an HPLC based kit that allows 2 dimensional profiling of 2-AB labelled glycans, providing reproducible, quantitative results. As no high pH conditions are used, structural integrity is assured and sample isolation and work-up is easy.

To find out how Signal<sup>™</sup> and GlycoSep<sup>™</sup> can extend your carbohydrate-related research, call us today.



Oxford GlycoSystems Inc. Cross Island Plaza, 133-33 Brookville Boulevard, Rosedale, New York 11422 U.S.A.

# 

## Congressional

AAAS Congressional Science & Engineering Fellows Program

Fellows spend one year on Capitol Hill working with Members of Congress or congressional committees as special assistants in legislative and policy areas requiring scientific and technical input. Two fellowships will be offered, with annual stipends of \$40,000.

## **Technology Policy**

AAAS-Critical Technologies Institute Science & Engineering Fellows Program

Fellows spend one or two years, working at the Critical Technologies Institute, providing expertise in industrial research and development, technology transfer, international competitiveness, and related issues. At least one Fellow will be selected. Applicants must have a minimum of five years industrial experience, as midlevel or senior executives. Stipends are negotiable, depending on qualifications and experience. Applicants must be U.S. citizens. An additional fellowship opportunity may be available at the White House Office of Science and Technology Policy.

## Diplomacy

AAAS Science, Engineering, & Diplomacy Fellows Program

Fellows work in international affairs on scientific and technical subjects for one year, either in foreign policy at the U.S. Department of State or in international development for the U.S. Agency for International Development. One Fellow will be selected at State and approximately 12 Fellows will be selected at USAID. The annual stipend varies with experience, starting at approximately \$43,000. Applicants must be U.S. citizens.

## Environmental

AAAS-EPA Environmental Science & Engineering Fellows Program

Fellows work as special research consultants with the U.S. Environmental Protection Agency for 10 weeks in the summer. The detailed, future-oriented research assists EPA in assessing the significance of long-range environmental problems. The stipend is \$950 a week. Applicants must be U.S. residents. Twelve Fellows will be selected.

Applicants should be postdoctoral to midcareer scientists and engineers, from any physical, biological, or social science or any field of engineering. The programs are designed to provide each Fellow with a unique public policy learning experience; to make practical contributions to the more effective use of scientific and technical knowledge in the U.S. government; and to demonstrate the value of science and technology in solving important societal problems. All Fellows participate in a rigorous orientation on the relevant congressional and executive branch operations and foreign affairs plus a year-long seminar series on issues involving science, technology, and public policy. The Congressional, Diplomacy, and Technology Policy programs begin in September 1995, and the Environmental program begins in June 1995. All application deadlines are January 15, 1995.

For additional program information and application instructions, write:

Fellowship Programs/Directorate for Science and Policy Programs American Association for the Advancement of Science 1333 H Street, NW, Washington, DC 20005 202/326-6600 Fax: 202/289-4950 Internet: science\_policy@aaas.org

# Science

## PERSONNEL PLACEMENT

## LINE CLASSIFIED ADVERTISEMENTS

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

## How to Submit a Classified Ad:

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

### Mail, FAX or Email materials to:

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

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

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

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Gordon Clark at +44 223 302 067 (telephone) or +44 223 302 068 (FAX).

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

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

## **DISPLAY PERSONNEL ADVERTISEMENTS**

For rates and info. for fractional display ads call:

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

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

Gordon Clark European Recruitment Advertising Telephone: +44 223 302 067 FAX: +44 223 302 068

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

## **POSITIONS OPEN**

#### FACULTY POSITIONS TULANE UNIVERSITY

As part of an ongoing environmental restoration and waste management research program, Tulane University School of Public Health and Tropical Medicine invites applications for several positions at the ASSISTANT or ASSOCIATE PROFESSOR Rank in the Department of Environmental Health Sciences. The positions are initially funded as research faculty appointments with possibility of conversion to tenure-track. Research will be carried out in the newly established ENTERGY Spatial Analysis Research Laboratory, part of the Tulane Center for Bioenvironmental Research. Openings in the following areas are available immediately: (Position 1) Risk Assessment/Radiation Effects; (Position 2) Exposure Assessment; (Position 3) Ecological Risk Assessment; (Position 4) Environmental/Resource Economics. Applicants should hold an earned doc-torate in environmental toxicology, risk assessment, eco-nomics, ecology, radiation health, or related disciplines. Experience with decision analysis, geographic information systems (GIS), and modeling is desirable. Review of appli-cations will continue until the positions are filled, but to insure consideration for the positions, materials should be submitted by December 15, 1994. Applicants should des-ignate the position number for which they are applying and send their curriculum vitae, brief description of research interests, three samples of written work, and arrange for three letters of reference to: William A. Toscano, Jr., Ph.D., Chair, Environmental Health Sciences Depart ment, Tulane University School of Public Health and Tropical Medicine, SL-29, 1430 Tulane Avenue, New Orleans, LA 70112-2699.

Tulane University is an Equal Opportunity Employer

#### FACULTY POSITION ATMOSPHERIC CHEMISTRY DUKE UNIVERSITY

Duke University's School of the Environment seeks solution of the Environment sector applicants for a tenure-track ASSISTANT PROFES-SOR in atmospheric chemistry. The successful applicant is expected to develop a nationally recognized externally funded research program, and to teach and advise graduate-level research and professional students. Interest and expertise related to air pollution with an emphasis on tropospheric chemistry is especially desirable. Experience in air quality management is also desirable. Training and/ or experience in one of the following areas is advanta-geous: gas-phase chemistry and photochemistry; emissions/measurements and reactions of natural/anthropogenic gases/aerosols; reactions, transport, and deposition of gases/aerosols; and gas-aerosol reactions. Interest in laboratory, field, and modeling studies, or in combinations thereof, are equally welcome. Applicants should send a curriculum vitae, statement of research and teaching interests, and three letters of reference to: Bruce C. Faust, Chair, Atmospheric Chemistry Search Committee, Duke University, School of the Environment, Levine Science Research Center, Durham, NC 27708-**0328**. Applications will be accepted through January 6, 1995, or until a suitable candidate is identified. *Duke* University is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT DIRECTOR CORNELL BIOACOUSTICS RESEARCH PROGRAM

The Cornell University Laboratory of Ornithology is seeking an **ASSISTANT DIRECTOR** of the Bioacoustics Research Program (BRP). The Assistant Director provides administrative and scientific assistance to BRP while conducting and reporting on his/her own original research. Responsibilities include: serving as scientific liaison with the research community, government and private agencies; writing proposals and raising research funds; managing and supervising daily operations, including budgetary and personnel matters; and participating in seminars and other scientific activities. Qualifications: doctorate or equivalent professional degree, postdoctorate experience preferred; demonstrated experience in acoustics, bioacoustics and signal processing is highly valuable; evidence of research ability as indicated by publications in the scientific literature, other scholarly work, and successful grant awards is necessary. To apply, send curriculum vitae, cover letter, and names and telephone numbers of three references to: Bioacoustics Search, **Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850 USA**. The position is available immediately; applications will be accepted until the position is filled.

Cornell University is an Equal Opportunity Employer/Educator.

## **POSITIONS OPEN**

#### ASSISTANT PROFESSOR PLANT MOLECULAR SYSTEMATIST

The University of Alaska (UA) Museum, the Department of Biology and Wildlife and the Institute of Arctic Biology at the University of Alaska Fairbanks invite applications for a full-time, **TENURE-TRACK POSITION** in plant evolutionary biology and systematics to start fall 1995. The successful candidate is expected to curate the botanical collection at the UA Museum, establish an active, externally funded research program using modern methods of molecular biology, teach one course per year, and participate in graduate and undergraduate training in plant systematics and collection curation. Ph.D. or equivalent in Biology or closely related field required. Museum curatorial, postdoctoral, and university teaching experience or demonstrated potential for university teaching experience preferred. The successful applicant will be provided with research space and start-up in the Institute of Arctic Biology, and a curatorial assistant. The herbarium has over 160,000 Alaska and holarcic specimens and is a regional resource center for floristic and biogeographic studies. To apply send curriculum vitae, statement of research and teaching interests, copies of reprints, and have at least three letters of reference sent to: **Dr. Gerald F**. Shields, **Molecular Plant Systematist Search, Institute of Arctic Biology, University of Alaska Fairbanks, P.O. Box 757000, Fairbanks, AL 99775-7000 (907-474-7656), by January 4, 1995.** *Women and minorities are encouraged to apply. University of Alaska Fairbanks is an Affirmative Action/Equal Opportunity Employer.* 

#### UNIVERSITY OF COLORADO SCHOOL OF MEDICINE ASSISTANT/ASSOCIATE PROFESSOR Department of Pharmacology Structural Biologist/Protein Chemist

We seek a **FACULTY** member employing NMR and/ or other physical chemical techniques for the study of the three-dimensional structures of proteins and the impact of structure on function. We are particularly interested in application of these techniques to study mechanisms of drug action. The University of Colorado School of Medicine is embarking on an initiative to develop a program in the area of molecular structure, and the recruited individual would be expected to play an integral role in such program development. The existing research strengths of the Pharmacology

The existing research strengths of the Pharmacology Department include molecular signal transduction, molecular biology of the cell cycle, neuropharmacology, and the chemistry and function of lipid signal molecules. We are seeking a new faculty member with interests that complement these existing strengths. Applicants must have a Ph.D. or M.D. degree, a vigor-

Applicants must have a Ph.D. or M.D. degree, a vigorous research program with the potential to develop significant extramural funding, and a commitment to teaching medical and graduate students.

Review of applications will begin December 1, 1994, and will continue until the position is filled. Submit curriculum vitae, names of four references, and

Submit curriculum vitae, names of four references, and a statement of current and future research interests to: Dr. R. Adron Harris, Chair, Search Committee, Department of Pharmacology, University of Colorado HSC, Box C236, 4200 East 9th Avenue, Denver, CO 80262. The University of Colorado is an Equal Opportunity/ Affirmative Action Employer.

#### FACULTY POSITION DEPARTMENT OF MOLECULAR AND MEDICAL GENETICS Oregon Health Sciences University Portland, Oregon

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level. The Department seeks individuals who have demonstrated excellence in research. Preference will be given to candidates with research interests in eukaryotic molecular, cellular or developmental genetics. Applicants should include a curriculum vitae, a brief description of research accomplish-

names of three references. Please address applications to: Faculty Search Committee Department of Molecular and Medical Genetics, L103 Oregon Health Sciences University 3181 SW Sam Jackson Park Road Portland, OR 97201-3098

ments, a brief description of future research goals, and the

THE SCRIPPS INSTITUTION OF OCEANOG-RAPHY (SIO), University of California, San Diego (UCSD), invites applications for two ASSISTANT RE-SEARCH POSITIONS: one in the Marine Biology Research Division (MBRD) and one in the Center for Marine Biotechnology and Biomedicine (CMBB). Research emphasis for the MBRD position may include comparative physiology, natural history, evolution, or biodiversity of marine organisms (including plants). Research emphasis for the CMBB position may include molecular biology applications, natural products chemistry, physiology, developmental biology, or marine pharmacology. Candidates must hold a Ph.D. and have demonstrated

Candidates must hold a Ph.D. and have demonstrated their ability to carry out high quality research. Salary is commensurate with experience and based on the University of California salary scale. Assistant Research positions are usually funded by extramural support; however, for these positions, salary support is available from the Institution equivalent to 12 months' salary, paid over two to five years at the Assistant rank. In this career track position, SIO will provide base salary support of 25% upon promotion to the Associate Research rank and 50% support upon promotion to Full Research as supplement to extramural support obtained by candidate, subject to the availability of Institutional funds. The successful candidate will be expected to establish an extramurally funded to research program and to involve SIO graduate students

research program and to involve SIO graduate students. Applicants should send a curriculum vitae, selected reprints, a list of three references, and a brief statement of research interests to: J.B. Graham, Director MBRD/ CMBB, Scripps Institution of Oceanography, University of California, San Diego, 9500 Gilman Drive, Department 0202(S), La Jolla, CA 92093-0202. Closing date for applications is December 31, 1994. UCSD is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR MOLECULAR IMMUNOLOGY AND PATHOLOGY UNIVERSITY AT STONY BROOK

Applications are invited for a tenure-track position at the level of **ASSISTANT PROFESSOR**. We are especially seeking applicants who will conduct independent research in the areas of molecular immunology and/or molecular oncology. Outstanding candidates with research interests in other areas of molecular pathology also will be considered. An attractive start-up package and competitive salary will be offered. Candidates are expected to establish an independently funded research program and to participate in Stony Brook's outstanding Graduate Program in Molecular and Cell Biology. Candidates should have a Ph.D. (or equivalent) with two or more years of postdoctoral experience. Women and minority candidates are strongly encouraged to apply.

Interested applicants should send a curriculum vitae, a description of their research plans and the names/addresses of three references to: Dr. James P. Quigley, Search Chairperson, Department of Pathology, State University of New York at Stony Brook, Stony Brook, NY 11794-8691.

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

#### FACULTY POSITION IN IMMUNOBIOLOGY

Applications are invited for a full-time tenure-track position at the ASSISTANT/ASSOCIATE PROFES-SOR level in the Department of Biological Sciences starting August 18, 1995, subject to the availability of funding. The candidate will be expected to develop a vigorous basic research program in immunobiology and to teach undergraduate/graduate level immunology. Applicants utilizing cellular and molecular research approaches will be preferred. This position requires two years of postdoctoral training, a record of productive research, and the ability to interact collegially. Appointment at the Associate level requires a record of funded research activity and a currently funded research program. The Department of Biological Sciences has three new, state-of-the-art Core Facilities in Molecular Biology, Cell Culture, and Protein Analysis. Deadline for applications is November 30, 1994, or the first of the month until the position is filled. Applicants should submit curriculum vitae, reprints of key publications, a statement of current and future research plans, and three names of references to: Chairperson, Immunobiologist Search Committee, Department of Biological Sciences, The Wichita State University, Campus Box 26, Wichita, KS 67260-0026. TTY 316-689-3067. Affirmative Action/Equal Opportunity Employer.

## **POSITIONS OPEN**

#### SMOOTH MUSCLE BIOLOGIST BRIGHAM AND WOMEN'S HOSPITAL AND HARVARD MEDICAL SCHOOL

Unique opportunity in smooth muscle biology at Brigham and Women's Hospital and Harvard Medical School. Seeking a scientist of vision who can appreciate an untapped, highly fundable opportunity to establish a laboratory capable of studying basic aspects of non-vascular smooth muscle physiology and its relation to aging. The laboratory would complement the Division's existing strengths in bladder physiology, pathophysiology, ultrastructure, and biomechanics, which focus on *in vivo* human and animal studies. The applicant should be familiar with molecular, biochemical, electrophysiologic, and calcium imaging techniques. In addition to more traditional physiologic techniques. Candidates should provide evidence of significant accomplishment and promise, and of ability to establish a nationally recognized independent research program. Ample support will be provided for start-up and early development. Candidates should possess Ph.D., M.D., or both degrees with suitable postdoctoral experience, and should be figible for appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level at Harvard Medical School.

Please send curriculum vitae and one-page summary of research interests to: Dr. Neil Resnick, Chief of Gerontology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Harvard University and Brigham and Women's Hospital are Affirmative Action Employers.

#### ASSISTANT PROFESSOR DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF WASHINGTON

Applications are invited for a tenure-track faculty position at the ASSISTANT PROFESSOR level in the Department of Pharmacology. For candidates with appropriate qualifications, appointment may be considered at the rank of associate professor. A Ph.D. or M.D. degree and postdoctoral research experience are required. Selection will be based on scientific excellence and the potential to establish an outstanding independent research program using molecular and cellular approaches to research prob-lems in signal transduction or other aspects of molecular pharmacology. The successful candidate will teach and participate in graduate student training in the Depart-ment of Pharmacology, the Interdisciplinary Graduate Program in Neurobiology, and the Interdisciplinary Mo Icular and Cellular Biology Program. Applicants should send their curriculum vitae, a statement of research plans, and three letters of recommendation by January 1, 1995. to the Pharmacology Search Committee, Department of Pharmacology, SJ-30, University of Washington, Seattle, WA 98195. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. Affirmative Action/Equal Oppor-, tunity Employer.

#### FACULTY POSITION DEPARTMENT OF BIOCHEMISTRY EASTERN VIRGINIA MEDICAL SCHOOL

The Department of Biochemistry, Eastern Virginia Medical School, invites applications for a 12-month-salaried, tenure-track position at the level of ASSISTANT or ASSOCIATE PROFESSOR. The successful candidate will be expected to maintain an independent externally funded research program in an area of modern biochemistry or molecular biology related to heart disease, inflammation, cancer, muscular disease, reproduction, or aging. The individual will also participate in teaching medical and graduate students. Please send curriculum vitae, bibliography, description of research plans, and the names of three references to: Dr. Karl A. Schellenberg, Department of Biochemistry, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. Eastern Virvinia Medical School is an Eaual Orportunity Institution.

ASSISTANT PROFESSOR IN PLANT BIOLO-GY, employing modern molecular approaches. Tenuretrack beginning August 1995. Ph.D. required; postdoctoral experience preferred. Expected to establish ongoing research program involving undergraduate students and teaching introductory and evolutionary biology. Send by December 1, 1994, letter including description of teaching and research interests, curriculum vitae, and a list of three references with addresses to: Earl Savage, Ph.D., Chair, Department of Biological Sciences, Indiana University South Bend, P.O. Box 7111, South Bend, IN 46634. An Equal Opportunity/Affimative Action Employer. MARINE MAMMAL STUDIES. The School of the Environment of Duke University invites applicants for a three-year term appointment at the rank of ASSISTANT **PROFESSOR** in the area of marine mammal studies. The successful applicant will carry the title of the Mary Derrickson McCurdy Visiting Fellow, and will be resident at the Duke Marine Laboratory in Beaufort, North Carolina. The appointee will be expected to contribute to the undergraduate and graduate teaching programs, and to develop a research program with extramural funding. The appointment can begin in the summer of 1995 and a nine-month annual salary and start-up research moneys will be provided. Currently a marine mammology course is taught in the summer at Beaufort by a distinguished non-resident teaching staff and the successful candidate is expected to participate in the course. Some bottlenose dolphin research and a marine vertebrate stranding program have been initiated by local scientists, including staff at the Duke Marine Laboratory, creating opportunities for collaboration. Priority will be given to candidates whose research interests include population dynamics, life histories, behavior/behavioral ecology, or conservation and policy.

Interested candidates should send a curriculum vitae, names of three references and a letter of research and teaching interests to: J. Ramus, Director, Duke University Marine Laboratory, Beaufort, NC 28516-9721. Communication is encouraged by telephone (919-728-2111) or by Email (jramus@acpub.duke.edu). Duke University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR— PHYSIOLOGY AND BIOPHYSICS. The Department of Physiology and Biophysics invites applications for a full-time, tenure-track position at the assistant/associate professor level in the general area of cell physiology with interests in developmental biology, signal transduction, cytoskeleton, and epithelial physiology—utilizing cellular or molecular approaches. Candidates will be expected to develop or have already established an independently funded research program. The appointee will join a department, matrixed between the School of Medicine and the College of Science and Mathematics, with existing strengths in cellular, molecular and membrane physiolo gy. The appointee will participate in a team-taught medical physiology course in an appropriate subject area. Applicants must have a Ph.D. and/or M.D. and at least two years of postdoctoral experience. Application screening will begin by January 3, 1995, and continue until position is filled. Send a curriculum vitae, reprints of three recent publications, statement of research interest/plans, funding support as well as names of three references, to be contacted later, to: Dr. Peter K. Lauf, Professor and Chair, Wright State University, Dayton, OH 45435. Wright State is an Affirmative Action/Equal Opportunity Employer. Women and minorities are enouraged to apply.

## SENSORY BIOLOGY

Applications are invited for a tenure-track position in sensory biology at the ASSISTANT or ASSOCIATE **PROFESSOR** level. We are especially interested in candidates who use physiological, biochemical, or molecular approaches in the areas of chemoreception or mechanoreception. Successful candidates would be expected to contribute to undergraduate and graduate instruction and to establish an independent research program. Competitive salary, facilities, and start-up funds are available. Submit curriculum vitae, statement of research interests, reprints of three most significant papers, and have at least three letters of reference sent by January 1, 1995, to: Sensory Biology Search Committee, T. H. Morgan School of Biological Sciences, 101 Morgan Building, University of Kentucky, Lexington, KY 40506-0225. *An Equal Opportunity/Affirmative Action Employer* 

**RESEARCH ASSISTANT PROFESSOR** (Cell Biology) with experience in gene expression and protein regulation in normal and cancer cell systems of IGF and IGFBPs. The position requires a Ph.D. and experience in molecular biology, immunohistochemistry, receptor-ligand interaction, protein purification and signal transduction pathways for IGF, IGFBPs and other growth factors. Recruitment open for 30 days. Applicants must submit a curriculum vitae, statement of research interests, and names of three references to: Dr. R. Rosenfeld, Chair, Department of Pediatrics, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201. Equal Opportunity/ Affirmative Action Employer.

# Postdoctoral Opportunities In The Biomedical Sciences.

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

## Molecular Biology Albert J. Fornace, Jr., MD

The focus is on mammalian genes involved in growth control and regulatory factors, particularly the tumor suppressor p53 which is activated by genotoxic stress. Studies involve elucidation of their regulatory pathways and the functions of these genes. Experience in molecular biology and/or protein biochemistry preferred. Applicants must have less than five years of postdoctoral experience. Laboratory of Molecular Pharmacology (OE-60), NCI, Building 37, Room 5C09, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

## Molecular and Developmental Neurobiology Vittorio Gallo, PhD

The regulation of glutamate receptor genes in developing glia is being investigated at the molecular and cellular levels. Analyses are performed in cultured cells and in transgenic mice, in order to characterize glutamate receptor gene promoters and regulatory transcription factors. Candidates should have a background in molecular biology and/or cellular neuroanatomy, and have less than five years postdoctoral experience. Laboratory of Cellular and Molecular Neurophysiology (OE-60), NICHD, Building 49, Room 5A78, 49 CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

## Molecular Neurobiology J. S. Hong, PhD

The signal transduction pathways regulating the expression of neuropeptide and cytokine genes in neural and glial systems are being investigated. Studies on the effects of neuropeptides on the biosynthesis and release of cytokines in microglial cells and potential roles of cytokines in neurodegeneration will be conducted. Applicants should have experience in neuropharmacology, neurochemistry or molecular biology. Laboratory of Environmental Neurosciences (OE-60), P.O. Box 12233, Mail Drop E1-01, Research Triangle Park, North Carolina 27709

## **Neuromuscular Diseases** Marinos C. Dalakas, MD

Research is directed at clinical, metabolic and molecular aspects of neuromuscular disease. Expertise in clinical evaluation and management, performance and interpretation of muscle and nerve biopsies, enzyme histochemistry of muscle, molecular-genetic studies and <sup>31</sup>P MRS of muscle is required. Applicants should be board eligible or certified in neurology and have less than five years postdoctoral experience. Medical Neurology Branch (OE-60), NINDS, Building 10, Room 4N248, 10 CENTER DR MSC 1382, BETHESDA MD 20892-1382.

## Nitric Oxide Synthesis in CNS Sheldon Milstein, PhD

Nitric oxide synthases all require tetrahydrobiopterin for activity. The co-regulation of both nitric oxide and tetrahydrobiopterin synthesis is being examined in glial cells and neurons especially with regard to diseases with neuroimmunological pathology, such as sepsis and AIDS. Experience in cell biology, molecular biology, and neurochemistry preferred. Applicants must have less than five years postdoctoral experience. Laboratory of Neurochemistry (OE-60), NIMH, Building 36, Room 3D30, 36 CONVENT DR MSC 4096, BETHESDA MD 20892-4096.

## **Retrovirology and Gene Therapy** Leslie K. Derr, PhD

RNA-mediated recombination (i.e., pseudogene formation, and recombination between cDNAs and chromosomal alleles) is studied, using a yeast model system. Key questions being addressed: how are cellular mRNAs reverse transcribed and inserted into the genome, and what factors control these events? Ongoing studies are dissecting the mechanism of RNA-mediated recombination and identifying the viral and cellular functions required. Laboratory of Molecular Microbiology (OE-60), NIAID, Building 4, Room 311, 4 CENTER DR MSC 0460, BETHESDA MD 20892-0460.

## **Transcription Factors and Gene Regulation** Nancy H. Colburn, PhD

Genes critical to rate-limiting steps in carcinogenesis are being identified using differential display techniques on transformation response variant cell lines. Dominant negative mutants of implicated transcription factors and regulatory kinases are being used in transgenic mice and cells to probe molecular interactions and targets for prevention of carcinogenesis. Molecular biology publications and less than five years postdoctoral experience required. Laboratory of Viral Carcinogenesis (OE-60), NCI, FCRDC, Building 560, Room 21-89, Frederick, MD 21701-1201.

## Additional Postdoctoral Fellowship Opportunities

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

The Postdoctoral Research Fellowship Opportunities catalog, which describes intramural laboratories at the NIH, is also available by request. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (http://www.nih.gov/). When connected, select Research Opportunities at the NIH Office of Education. If you would like to request a catalog or have further questions, please contact the Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, 301-496-2427, Fax 301-402-0483.

## To Apply

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



# National Institutes Of Health

Office of Education The NIH is an Equal Opportunity Employer

The Department of Anatomy, School of Veterinary Medicine, Purdue University, invites applications for a tenure-track, ASSISTANT PROFESSORSHIP. Candidates are being sought who have a Ph.D. from an anatomy department or a related discipline with a strong morphological background, two to three years of postdoctoral research experience in contemporary structural or molecular biology, and experience in teaching compara-tive gross anatomy. Preference will be given to those with a D.V.M. degree. The department emphasizes quality and innovative instruction and interdepartmental collaborative research. Departmental faculty conduct research in the cellular and molecular aspects of tissue and organ development, growth, and regeneration. Excellent facilities for animal model research and teaching exist within the department, school, and university. Applicants will be expected to establish a strong, extramurally funded research program. A research laboratory, research technician (for at least two years) and start-up funds will be provided by the department. Graduate student support is also available.

Applications will be accepted through December 2, 1994, or until the position is filled. Interested applicants should send their curriculum vitae, a two-to-three page description of research plans and teaching goals, reprints of publications, and names, addresses, and telephone numbers of three referees, all to be sent to: Dr. E. J. Hinsman, VAN Search Committee, School of Veterinary Medicine Purdue University, West Lafayette, IN 47907-1242. Telephone: 317-494-8622 or FAX 317-494-1772. Purdue University is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

#### ASSISTANT PROFESSORS MICROBIOLOGY-IMMUNOLOGY ZOOLOGY-MOLECULAR BIOLOGY

The Department of Biology at the University of Central Arkansas invites applications for two tenure-track **AS-SISTANT PROFESSOR** positions to begin August 1995.

1. Microbiology–immunology: Ph.D. with specialization in immunology and experience with animal viruses and cell culture. Teach microbiology–immunology and introductory biology courses.

2. Zoology: Ph.D. having demonstrated experience with modern molecular biology techniques. Successful candidate will teach zoology, general biology and upper division course in specialty. Both positions anticipate the establishment of active research programs. Recent Ph.D.'s and postdoctorates are encouraged to apply. Submit letter of application, curriculum vitae, copies of transcripts, a brief description of teaching philosophy and research interests, and three letters of recommendation, to: Dr. Derald Smith, Microbiology Search Committee, Department of Biology, University of Central Arkansas, Conway, AR 72035. Telephone: 501-450-3146; FAX: 501-450-5914. Both positions are contingent upon funding. Review of applications will begin December 15, 1994, and continue until the positions are filled. The University of Central Arkansas is an Affirmative Action/Equal Opportunity Employer.

#### CONSERVATION GENETICS

The Department of Fisheries and Wildlife and the Biotechnology Center at Utah State University seek to fill a tenure-track ASSISTANT PROFESSORSHIP in Conservation Genetics beginning July 1, 1995. We seek an animal population or quantitative geneticist with expertise in advanced molecular or other biotechnological methods that can be applied to conservation problems. An active research program with extramural funding and graduate student training is expected. Teaching will entail three quarter-length courses per year (Genetics in Con-servation and Management, Biotechnology in Natural Resources, and a graduate seminar). Ph.D. required. Postdoctoral experience preferred. Applicants should send a curriculum vitae, a statement of teaching interests. and a summary of proposed research interests, and should arrange to have letters sent by three scientists who can evaluate the candidate's accomplishments and potential. Review of applications will begin on December 1, 1994, and will continue until the position is filled. Conserva tion Genetic Search, Department of Fisheries and Wildlife, College of Natural Resources, Utah State University, Logan, UT 84322-5210. Utah State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

## **POSITIONS OPEN**

#### **EVOLUTIONARY MORPHOLOGIST**

The Department of Ecology and Evolutionary Biology is a group of strongly interactive faculty with particular strengths in ecology, evolutionary genetics, morphology and behavior. We announce an ASSISTANT PROFES-SORSHIP for an evolutionary morphologist. All candidates must have a doctorate, demonstrated excellence in research, potential for excellence in teaching, ability to develop an independently funded research program, and potential to complement and interact productively with departmental faculty. Fields of particular interest include ecomorphology, development, historical/phylogenetic analysis, and functional organization/biomechanics of vertebrates. Responsibilities include teaching in a human morphology course for medical students and contributions to courses in comparative morphology and evolutionary biology. Applicants should submit résumé, statement of research plans and teaching interests, and representative reprints; and have three letters of reference, to be received by 2 January 1995, sent to the Department of Ecology and Evolutionary Biology, Brown University, Providence, RI 02912 in care of Dr. G. E. Gos-low, Jr., Box G-B2. An Equal Opportunity/Affirmative Action Employer.

FISH AND WILDLIFE ECOLOGY: ASSISTANT or ASSOCIATE PROFESSOR in Fish and Wildlife Ecology, tenure-track, nine-month faculty position available June 1995 in the Department of Range and Wildlife Management, Texas Tech University. Summer salary is dependent on availability of teaching and research fund-ing. The position is approximately 50% teaching and 50% research. The applicant should have a Ph.D. in either fisheries, wildlife, or closely related area, preferably with experience with fish and wildlife populations. Preference will be given to individuals with expertise in Vertebrate Population Biometry/Modeling of processes related to population growth or estimation. Applicants should send curriculum vitae, transcripts, description of research inter-ests, and have three letters of recommendation forwarded by 15 January 1995, to: Dr. Loren M. Smith, Chairman Wildlife Management, Texas Tech University, Lub-bock, TX 79409-2125. Telephone: 806-742-2842; FAX: 806-742-2280; Email: C7LMS@TTACS1.TTI. EDU. Texas Tech is an Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITION DEPARTMENT OF BIOLOGY UNIVERSITY OF OREGON

The Department of Biology at the University of Oregon invites applicants for a tenure-track faculty position with joint membership in the Institutes of Molecular Biology and Neuroscience. We seek individuals using genetics (including genomics) to address questions in development, neural function, or behavior at a molecular level. Although we are primarily interested in applicants at the ASSISTANT PROFESSOR level, we will consider more senior applicants. The successful applicant will have demonstrated the potential for excellence in both research and teaching. Applicants should submit, by December 9, 1994, a curriculum vitae (including teaching experience), a bibliography, and a statement of research interests and plans. Applicants should also have four letters of recommendation sent to: Molecular Biology, Neuroscience Search Committee, Department of Biology, 1210 University of Oregon, Eugene, OR 97403-1210. The University of Oregon is an Equal Opportu-nity/Affirmative Action Employer committed to compliance with the ADA and cultural diversity. We encourage women and minorities to apply.

#### TENURE-TRACK RESEARCH FACULTY POSITION TRANSPLANTATION

Applications are invited for an ASSISTANT or ASSO-CIATE PROFESSOR position in the tenure-track with appointments in the departments of Surgery and Microbiology and Immunology at the University of Kentucky. The candidate will be expected to develop a research program in transplant biology. The applicants should have a Ph.D. in immunology or transplant related basic sciences, have a funded research project and an interest in transplant research. Please contact: Dinesh Ranjan, M.D., Department of Surgery, 800 Rose Street, Lexington, KY 40502-0084. We are an Affirmative Action/ Equal Opportunity Employer.

## **POSITIONS OPEN**

#### CONSERVATION BIOLOGY

The Department of Zoology at North Carolina State University seeks applicants for ASSISTANT PROFES-SOR in Conservation Biology. The position is 12-month tenure-track, combining teaching and research. Teaching duties include undergraduate and graduate divising and undergraduate (including ecology) and graduate (including specialty and probably ornithology) courses. Candidates should show research achievement in conservation biology at the community or landscape level, preferably emphasizing terrestrial vertebrates. Candidates are expected to show potential for excellence in teaching and to have received a Ph.D. in conservation biology or a related field by July 1995; postdoctoral research experience is preferred. A letter of application, three letters of recommendation, and curriculum vitae should be sent to: Sam Mozley, Conservation Biology Search, Department of Zoology, North Carolina State University, Raleigh, NC 27695-7617. Applications will be accepted until December 9, 1994, or a suitable candidate is identified. We are looking to diversify our faculty; minorities and women are encouraged to apply. North Carolina State University is an Equal Opportunity/Affimative Action Employer.

#### ASSISTANT PROFESSOR BIOGEOCHEMISTRY, UNIVERSITY OF COLORADO AT BOULDER

The Department of Environmental, Population and Organismic Biology and the Institute of Arctic and Alpine Research seek applications for a tenure-track position in biogeochemistry. Preference will be given to candidates at the **ASSISTANT PROFESSOR** level, but all candidates will be considered. The successful candidate will have a record of scholarly achievement and an interest in teaching in the field of biogeochemistry, e.g., ecosystem carbon dynamics, radiatively active trace gas flux, nutrientecosystem interactions, or any other aspect of biogeochemical processes. Candidates must have a Ph.D. degree.

Interested persons should send a cover letter, a curriculum vitae, and the names of three references to: Dr. T. R. Seastedt, Chair, Biogeochemist Search Committee, EPO Biology, University of Colorado, Campus Box 334, Boulder, CO 80309-0334, by 1 December 1994.

The University of Colorado at Boulder strongly supports the principle of diversity. We are particularly interested in receiving applications from women, ethnic minorities, disabled persons, veterans and veterans of the Vietnam era.

## IMMUNOBIOLOGY/MOLECULAR GENETICS UNIVERSITY OF MIAMI

The Division of Hematology/Oncology, a component of the NIH-funded Sylvester Comprehensive Cancer Center seeks an ASSISTANT or ASSOCIATE PRO-FESSOR with laboratory experience and skills in cancer immunology or molecular genetics. The Division is expanding its translational research to increase the linkage of its clinical research programs in breast cancer, gene transfer therapy, lymphoma and bone marrow transplantation with well-established basic science efforts in immunobiology and cell surface receptor modulation of malignant cell proliferation and metastases. Either Ph.D. or M.D. candidates will be considered for these positions. Please send a curriculum vitae, a cover letter describing your research interests, and the names, addresses, and telephone numbers of three potential references to: Peter A. Cassileth, M.D., Chief, Hematology/Oncology Division, University of Miami/Sylvester Cancer Center, 1475 N.W. 12th Avenue (D8-4), Miami, FL 33136. The University of Miami is an Equal Oppotunity Employer.

The Chemistry Department of the State University of New York at Plattsburgh solicits applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level in bioorganic chemistry (Search No. 1905A-246) and environmental chemistry (Search No. 1905B-246) to begin August 1995. Earned Ph.D. in the area required. Candidate must demonstrate a potential for significant scholarly research and be committed to excellence in teaching in an undergraduate liberal arts program with an understanding of, and sensitivity to, minority and gender concerns.

Women and racial minorities are encouraged to apply and can compete for the NYS/UUP Drescher Affirmative Action Award, a paid one-year pretenure leave. Send résumé, transcripts, three letters of reference, one-page teaching philosophy and description of research directions by February 1, 1995, to: Chair, Search Committee, c/o Office of Personnel, SUNY Plattsburgh, Search No. \_\_, Plattsburgh, NY 12901. SUNY is an Equal Opportunity/Affirmative Action Employer.

## BIOTECHNOLOGY RESEARCH ASSOCIATE

The Molecular Toxicology Group of the Health Sciences Research Division at the Oak Ridge National Laboratory (ORNL) has immediate PhD-level openings for recent graduates. One position will conduct studies on a novel non-invasive diagnostic and therapeutic technology. Relevant experience in tissue culture and molecular biology techniques is required which may include: insertion of small oligonucleotides into eucaryotic cells, immunochemistry procedures and cloning in procaryotic and eucaryotic systems, and common techniques to manipulate and analyze nucleic acids. Experience in anti-sense technologies and use of chemically modified oligonucleotides may be useful.

On-going projects also include studies in tumor suppressor gene phosphorylation, enhancement of cellulase production in bacteria, and identification of genes related to immunodeficiency in mutant mice using differential display. Experience in differential display, signal transduction/protein phosphorylation, or cloning in non-E coli systems may be considered for these projects.

ORNL is managed by Martin Marietta Energy Systems, Inc. for the US Department of Energy. For immediate consideration, send your resume by December 2, 1994, to: Dr. Craig Dees, Dept. SCI-1111, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6480. For more information, phone (615) 576-2128.

ORNL is an equal opportunity employer committed to building and maintaining a diverse workforce.





Biogen is a dynamic young biotechnology company principally engaged in developing genetically engineered human pharmaceuticals. Now in our 17th year, we are one of the few profitable biotech companies in the U.S. Revenues

come from five products -- including Intron (R)A alpha interferon and hepatitis B vaccines and diagnostics -- sold throughout the world by licensees or affiliates. Current research is directed toward the discovery and development of proprietary products to treat inflammation, cardiovascular disease, AIDS and certain cancers.

## **Research Scientist - Pharmacology**

As a key member of our Drug Discovery and Evaluation Department, you will assume responsibility for a wide variety of pharmacological functions. Your primary responsibilities will entail design and implementation of *in vivo* animal models, as well as the pharmacologic characterization and refinement of potential small molecule therapeutic agents. This position will require close collaborative efforts with our synthetic chemistry, protein engineering and molecular biology departments. The successful candidate will hold a PhD in Pharmacology and have 5 years' independent research experience. An in-depth knowledge of immunology and cardiovascular physiology also essential, as is some supervisory experience.

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Profitability, and Growth. In addition, our compensation and benefits package 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, you have an opportunity to join us now. Please forward your resume, to: Biogen, Inc., Professional Staffing - Dept. JT, 14 Cambridge Center, Cambridge, MA 02142, FAX: (617) 679-3595. Biogen is an Equal Opportunity Employer.



## MARINE BIOLOGICAL LABORATORY

## 1995 Summer Courses

## BIOLOGY OF PARASITISM: Modern Approaches (June 11 - August 12)

This course, for students, postdocs and faculty, focuses on the molecular basis of parasite function and the host/parasite interaction, with special emphasis on the most recent and exciting developments in this area. The course has four sections: cell biology, immunology, molecular biology, and biochemistry. Each section includes daily lectures from course faculty and outside speakers, and intensive laboratory experimentation. Limited to 16 students. **Director:** Stephen L. Hajduk, University of Alabama at Birmingham.

## EMBRYOLOGY:

Cell Differentiation and Gene Expression in Early Development (June 13 - July 26)

An advanced level course intended for graduate students, postdoctoral fellows, and other research scientists who wish a current treatment of major issues in the experimental analysis of developmental biology of the embryo, and the diverse intellectual approaches now useful in this field. Limited to 24 students. **Directors:** Eric H. Davidson, California Institute of Technology; Michael Levine, University of California, San Diego; and David R. McClay, Duke University.

## MICROBIAL DIVERSITY

## (June 11 - July 27)

An intensive laboratory and lecture course intended for graduate or postdoctoral students as well as established investigators who desire to become competent in microbiological techniques for isolation and working with a broad range of microbes. Microbial diversity will be described and analyzed in biochemical, physiological, and selected molecular biological terms. Limited to 20 students. **Directors:** Edward R. Leadbetter, University of Connecticut; and Abigail Salyers, University of Illinois.

## NEURAL SYSTEMS AND BEHAVIOR

## (June 11 - August 4)

Intended for graduate and postdoctoral students as well as established investigators. This course focuses on the neural basis and plasticity of behavior. Twenty students participate in intensive laboratories/lectures which combine state-ofthe-art neurobiological techniques with behavioral analyses. **Directors:** Janis C. Weeks, University of Oregon; and Harold H. Zakon, University of Texas.

## NEUROBIOLOGY (June 11 - August 12)

An intensive course in molecular and cellular neurobiology for doctoral and postdoctoral students and established investigators. Lectures will offer a systematic discussion of fundamental issues and research paradigms; work in the laboratories will address these issues using the full range of contemporary physiological, molecular, and structural techniques. Limited to 12 students. **Directors:** Gary Banker, University of Virginia; and Daniel V. Madison, Stanford University.

## PHYSIOLOGY: Cellular and Molecular Biology (June 11 - July 22)

For a class of 36 pre- and post-doctoral students who desire training in stateof-the-art methods and research strategies in genetics, physiology, and cellular and molecular biology. Pre-doctoral students and physician scientists beginning their laboratory training are particularly encouraged to apply. Interested students may apply for 2-4 weeks of postcourse research starting June 24. **Director:** Mark S. Mooseker, Yale University.

Application Deadline: March 1, 1995

## Tuition: \$3,000

Partial financial aid is available to qualified candidates. For application forms, contact: Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543, (508) 548-3705, ext. 401; Internet: admissions@mbl.edu; World Wide Web: http://www.mbl.edu. The MBL is an EEO Affirmative Action Institution.



The Veterinary Pathobiology Department, Purdue University School of Veterinary Medicine, invites applica-University School of Veterinary Medicine, invites applica-tions for a tenure-track position as ASSISTANT PRO-FESSOR of Molecular Virology. Candidates must have Ph.D. training in virology and postdoctoral experience in molecular virology. D.V.M. preferred. Responsibilities include teaching veterinary virology and conducting research by applying contemporary molecular, biological, or biochemical approaches to problems in virology or viral diseases. The candidate is expected to establish an inde-pendent extramurally funded research program and desire to collaborate with other faculty on campus. Candidates should submit a two-to-three page research plan, curriculum vitae, and names of three references by November 30, 1994, to: Dr. Peixuan Guo, Virologist Search Committee Chairperson, c/o Dr. A. H. Rebar, VPB Department, 1243 VPTH Building, Purdue Univer-sity, West Lafayette, IN 47907-1243. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

## BACTERIAL PATHOGENESIS UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

The Department of Molecular Genetics and Microbiology invites applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level in the field of bacterial pathogenesis. Ability to establish an externally funded research program and to teach both graduate and medical students is expected. A competitive start-up package will be provided to the successful candi-date. Applications should include a curriculum vitae, a brief statement of research accomplishments and interests, reprints of selected publications (not to exceed of three), and the names, addresses, and telephone numbers of three individuals whom the applicant has asked to send letters of reference. Send application to: Jon D. Goguen, Chair, Bacterial Pathogenesis Search Committee, De-partment of Molecular Genetics and Microbiology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01655-0122. University of Massachusetts Medical Center is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR ORTHOPAEDICS/ MOLECULAR BIOLOGY: The Musculoskeletal Research Laboratory, Department of Orthopaedics, Penn State College of Medicine invites applications for a tenure-track position in molecular biology of bone or cartilage. We seek an individual using modern molecular biol-ogy techniques to study mechanisms underlying musculoskeletal disease. The successful applicant will have a Ph.D., M.D., or D.V.M. or equivalent degree, at least two years of postdoctoral training and will have demonstrated the potential to develop an independent research program and secure extramural research funds. Applicants should send curriculum vitae, names and addresses of three references and a brief statement of research interests to: Henry J. Donahue, Ph.D., Director Musculoskeletal Research Laboratory, Department of Orthopaedics, The Pennsylvania State University College of Medicine, P.O. Box 850—Drawer-S, Hershey, PA 17033. FAX: 717-531-7583. Email: hdonahue@ortho.hmc. psu.edu. Penn State is an Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

#### FACULTY POSITION

The Department of Molecular Biology at Vanderbilt University seeks candidates to fill a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Any area of Molecular Biology will be considered, with preference given to candidates in areas such as structural biology/molecular biophysics, molecular developmental biology, or other areas that complement those of the present faculty. The central criteria are excellence of record and the promise of future excellence in research and in teaching Molecular Biology at undergraduate and graduate levels. Women and minority candidates are especially encouraged to apply. Applicants should send a letter of application, together with a curriculum vitae and a statement of current and future research interests, and should arrange for three letters of recommendation to be sent to: Prof. James V. Staros, Chair, Department of Molecular Biology, Vanderbilt University, Box 1820 Station B, Nashville, TN 37235 USA. Review of appli-cations will begin December 1, 1994, and will continue until the position is filled. Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.

## **POSITIONS OPEN**

IMMUNOLOGIST. The Department of Microbiology and the Basic Medical Sciences Program at Washington State University invites applications for a nine-month. renure-track faculty position at the ASSISTANT PRO-FESSOR level. Applicants must have postdoctoral train-ing and will be expected to have expertise in immunology preferably at the molecular level as it pertains to infectious disease. Qualifications should be documented by published papers in refereed journals and by other evidence of accomplishments. The successful candidate will also be expected to establish an active, externally funded, research program and participate in medical, graduate and undergraduate student teaching in the area of immunology. Send curriculum vitae, statement of research interests and professional objectives, and at least three letters of refer-ence to: Dr. Nancy S. Magnuson, Search Committee Chairman, Department of Microbiology, Washington State University, Pullman, WA 99164-4233. Review of applications begins December 15, 1994, and continues until the position is filled. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.

#### FACULTY POSITION IN NEUROSCIENCE

A TENURE-TRACK faculty position is available in the Department of Neuroscience at the University of Virginia Health Sciences Center.

We are seeking to recruit an individual with expertise in Cellular and/or Molecular Neuroscience.

We anticipate making this appointment at the ASSIST-ANT PROFESSOR level although applications from candidates at all levels will be considered.

Please send curriculum vitae, sample reprints, a description of research plans, and the names and telephone numbers of three references to:

Oswald Steward, Ph.D. Professor and Chair Department of Neuroscience University of Virginia Health Sciences Center Charlottesville, VA 22908

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

## FACULTY POSITION IN MOLECULAR NEUROBIOLOGY THE OHIO STATE UNIVERSITY

Applications are invited for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFES-SOR level. The successful candidate will join the seven current faculty in new laboratories at the Neurobiotechto apply molecular biological approaches to address sigfacility and other excellent support facilities are available. The Ohio State University has made a major commitment to establish an outstanding interdisciplinary program in neurobiotechnology. Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: **Dr. Anthony Young**, Chairperson, Molecular Neurobiology Search Com-mittee, 206 Rightmire Hall, 1060 Carmack Road, Conutree, 200 Rightmire Hall, 1000 Carmack Road, Co-lumbus, OH 43210. Deadline: January 31, 1995. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veter-ans and individuals with disabilities are encouraged to apply.

#### SOUTHEASTERN LOUISIANA UNIVERSITY Department of Biological Sciences

The Department of Biological Sciences invites applications for a tenure-track position available August 1995, at the ASSISTANT PROFESSOR level. The selected individual will be a physiologist who addresses ecological questions, preferably in wetlands ecology. Preference will be given to applicants with experience in field and labo-ratory ecology and who have expertise in biochemical, biophysical and/or molecular techniques. Teaching responsibilities include undergraduate/graduate courses in botany and in the area of specialty. Ph.D. required; postdoctoral experience preferred. Salary is commensurate with degrees and experience. Send letter of application, résumé, statement of research and teaching interests and names of three references to: Dr. Gary Childers, De-partment of Biological Sciences, SLU 814, Ham-mond, LA 70402. Deadline for receipt of applications is January 10, 1995. Southeastern Louisiana University is an Affirmative Action/ADA/Equal Opportunity Employer.

#### MICROBIOLOGY/IMMUNOLOGY/ CELL BIOLOGY

Two tenure-track positions at ASSISTANT PRO-FESSOR level at Emporia State University. Nine-month appointments, with possible summer assignment, starting August 1995. Ph.D. and strong commitment to teaching

required. Semester teaching load usually 12 contact hours. Teaching assignment includes introductory immunology with laboratory for position No. 1, and pathogenic mi-crobiology with laboratory for position No. 2. Appointees will also teach other courses in microbiology, molecular and/or cellular biology, or general biology. Other duties include academic advising, committee ser-

vice, and supervising research of undergraduate and Master's students. Development of research programs appro-priate for available resources is also expected.

Screening of applicants will begin December 10, 1994, and continue until positions are filled. Send curriculum vitae, transcripts, letter stating teaching and research interests, and names/addresses/telephone numbers of four references to: Chair, Biology Search Committee, Cam-pus Box 4050, Emporia State University, Emporia, **KS 66801-5087**. Emporia State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of protected classes.

FACULTY POSITIONS in Biochemistry and Molecular Biology—The Department of Biology, Division of Molecular Sciences and Microbiology invites applications for two tenure-track positions, one in biochemistry and one in molecular biology. The appointments will be made at the rank of ASSISTANT or ASSOCIATE PROFES-SOR depending on qualifications. Minimum qualifica-tions are a Ph.D. degree and postdoctoral training. Successful candidates will be expected to develop a strong graduate research program and to provide quality teach-ing to undergraduate and graduate students. Review of applicants will begin December 1, 1994, and continue until the positions are filled. A curriculum vitae, a statement of research plans, reprints of the candidate's most significant publications, and at least three letters of rec-ommendation should be sent to: **Dr. S. Edward Stevens**, Jr., Director, Division of Molecular Sciences and Microbiology, The University of Memphis, 201 Life Sci-ences Building, Memphis, TN 38152. The University of Memphis is an Equal Opportunity/Affirmative Action University

VISUAL PERCEPTION, BROWN UNIVERSITY: The Department of Cognitive and Linguistic Sci-ences invites applications for a tenure-track position in visual perception or visual cognition, beginning July 1, 1995. Candidates at the ASSISTANT PROFESSOR level, including those nearing tenure, are welcome to apply. Preference will be given to the areas of vision, perception, object recognition, imagery, attention, and visual-motor control. Applicants should have a strong experimental research program, strong computational interests, and a broad teaching ability in cognitive science at both the undergraduate and graduate levels. Women and minorities are especially encouraged to apply. Send curriculum vitae, three letters of reference, reprints and pre-prints of publications, and a one-page statement of re-search interests to: Dr. William H. Warren, Chair, Vision Search Committee, Department of Cognitive & Linguistic Sciences, Brown University, Providence, RI 02912 by January 1, 1995.

Brown University is an Équal Opportunity/Affirmative Action Employer.

## CELL BIOLOGIST UNIVERSITY OF VIRGINIA

The Department of Biology at the University of Virginia invites applications for a tenure-track appointment at the ASSISTANT PROFESSOR level. We are seeking a researcher of exceptional promise using molecular, genet-ic and/or biophysical approaches to investigate funda-mental questions in Cell Biology. Applicants should submit curriculum vitae, a summary of past accomplishments, a description of future research plans and teaching interests, and should arrange for three letters of reference to be ests, and should arrange for three letters of reference to be sent to: Cell Biologist Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Char-lottesville, VA 22903-2477. Women and members of minority groups are encouraged to apply and to identify themselves. Screening of applications will begin immedi-ately. The University of Virginia is an Equal Opportunity/ Affirmative Action Employer. Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of innovative pharmaceuticals. We currently have opportunities in the following areas:

## Wallingford, Connecticut

## **CNS Drug Discovery Group**

## Director

## **Neurodegenerative Diseases**

The successful candidate will have 10 or more years of relevant postdoctoral experience addressing aspects of neurodegenerative disorders. We seek an individual with a strong history of research accomplishment and a multidisciplinary understanding of molecular neurobiology, pharmacology, and electrophysiology in the context of neurodegenerative disease or neuronal cell death. Expertise managing a diverse group of scientists in a dynamic research environment is highly desirable. **Dept. HD-CNS-D.** 

## **Research Scientists**

We are actively pursuing research in the areas of neurodegenerative diseases (stroke and Alzheimer's Disease), sleep disorders, and eating disorders. Our research environment is characterized by multidisciplinary collaborations among scientists trained in different aspects of neuroscience and molecular neurobiology. Successful candidates will share an interest in better understanding neurologic and psychiatric disorders as they relate to the identification and preclinical development of potential new therapeutics which will meet unmet medical needs or offer significant advantages over currently available agents. Applicants should have at least three years of relevant postdoctoral experience. The productivity and expertise of the candidate are more important than are the specific areas of training. Opportunities at various levels exist in molecular neurobiology, neuropharmacology and neurophysiology, and in behavioral neuroscience.

Dept. HD-CNS.



## Synthetic Organic Chemists Cancer Research

These positions, for M.S./B.S. level chemists, will involve you in the synthesis of new compounds for biological evaluation as agents in the treatment of cancer. Laboratory experience in modern spectroscopic and experimental techniques and preparative chromatography, along with a working knowledge of synthetic organic chemistry, is essential. Protein experience could be advantageous, but not required. **Dept. HD-337.** 

## **Research Investigator** Microbiology

Candidate must have Ph.D. plus 2 years postdoctoral or 2 years related industry experience in fungal molecular biology or biochemistry. **Dept. HD-326.** 

Please forward resume with salary history and Dept. # of interest, to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, 5 Research Parkway, P.O. Box 5101, Wallingford, CT 06492-7661.** 

## **Princeton, New Jersey**

## Senior Research Investigator, Ph.D. Ion Channel Research

The Department of Pharmacology has an opening for an Electrophysiologist with a Ph.D. degree with postdoctoral training or equivalent experience in the areas of the physiology, pharmacology, biophysics, or molecular biology of ion channels. The ideal candidate will have a proven record of independent achievement, and broad skills in the area of ion channel research. Experience in the study of cloned ion channels expressed in amphibian or mammalian cells would be highly desirable. Excellent oral and written communication skills are also required.

Please forward resume with salary history to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, Dept. BM-270, P.O. Box 4000, Princeton, NJ 08543-4000.

**Bristol-Myers Squibb** 

**Pharmaceutical Research Institute** 

VERTEBRATE FIELD BIOLOGIST—Applications are invited for a tenure-track position at the ASSIST ANT PROFESSOR rank, to begin August 1995. Ph.D. is required. Primary teaching responsibilities will be ecology and general zoology; additional course(s) may include herpetology, ichthyology, mammalogy, ornithology, or functional morphology. The successful candidate should have a strong commitment to teaching and will also be expected to involve undergraduates in a research program. Adjacent to the campus is a managed 220 acre Bioreserve. Applicants must submit undergraduate and graduate transcripts, three letters of reference, a curriculum vitae, and a statement of educational and research objectives by January 17, 1995, to the Search Committee, Department of Biology, Denison University, Granville, OH 43023.

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

#### ASSISTANT PROFESSORS TENURE-TRACK

The Department of Biological Sciences is searching for persons who will interact with a growing group of ecologists, evolutionary biologists, and molecular biologists and who will add strength in systematics and comparative animal physiology. We seek an Invertebrate Biologist using contemporary approaches to phylogenetic and systematic problems and a Comparative Physiologist/Physiological Ecologist using molecular or whole-organism approaches to physiological adaptations. Candidates for these positions must have a Ph.D., postdoctoral experience, and proven ability as independent researchers. Teaching both graduate and undergraduate courses is required. Reviews begin January 15, 1995. Forward curriculum vitae, a letter describing immediate and long-term research and teaching interests, selected reprints, and have three letters of recommendation sent to: Dr. William J. Etges, Chair, Invertebrate Systematics Search Committee or Dr. Kimberly G. Smith, Chair, Physiological Sciences, SCEN 629, University of Arkansas, Fayetteville, AR 72701. The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.

## ASSISTANT PROFESSOR OF ANATOMY

One tenure-track, 12-month faculty position at the **ASSISTANT PROFESSOR** rank. The initial contract is for two years and can begin January 1, 1995. Applicants must have a Ph.D. in Anatomy and a commitment to teaching. The major teaching would be in Gross Anatomy to Medical and Physical Therapy Students.

As required by the Immigration Control act, you must be able to provide documentation verifying the right to work in the United States.

Applicants should send a curriculum vitae and three letters of recommendation to:

#### Rafi Younoszai, Ph.D. Chair, Search Committee College of Osteopathic Medicine of the Pacific 309 East 2nd Street Pomona, CA 91766-1889

The College is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minorities.

#### TWO TENURE-TRACK ASSISTANT PROFESSOR POSITIONS IN DEVELOPMENTAL NEUROSCIENCE Department of Neurobiology and Anatomy University of Utah School of Medicine

Applicants must have a Ph.D., M.D., or equivalent degree, postdoctoral research experience, and the ability to develop a strong independent research program. Applicants with demonstrated research expertise in any aspect of nervous system development will be considered. A strong commitment to teaching medical and graduate students is also required; prior teaching experience in a medical school basic science curriculum is preferred. These positions will not require teaching of human (gross) anatomy. Send a curriculum vitae (including bibliography and list of grant support), a statement of research interests, and names and addresses of three references to: Dr. T. N. Parks, Chair, Department of Neurobiology and Anatomy, University of Utah School of Medicine, Salt Lake City, UT 84132, U.S.A. Deadline is February 1, 1995, or until suitable candidates are identified. Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minorities.

## **POSITIONS OPEN**

ORGANIC CHEMIST—ASSISTANT PROFES-SOR, tenure-track, Ph.D., September 1, 1995; teach general chemistry and organic chemistry. The candidate's potential as a teacher and researcher for an undergraduate program is essential. Preference given to individuals with research background and resultant publication in refereed journals. Application deadline is December 1, 1994. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The chemistry department is ACS certified, offering the B.S. in chemistry and B.S. in environmental chemical technology. Submit curriculum vitae, description of proposed research, a statement of educational philosophy and three letters of recommendation to: Dr. Norman Horner, Director, Division of Sciences, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. Equal Opportunity/Affirmative Action Employer.

## ASSISTANT/ASSOCIATE PROFESSOR VECTOR BIOLOGY

The Department of Molecular Microbiology and Immunology at the Johns Hopkins University School of Public Health seeks to recruit an ASSISTANT/ASSO-CIATE PROFESSOR with research experience in vector biology. The individual would be expected to develop an independent research program within an interactive environment of investigators interested in pathogenesis and transmission of microbial diseases. There will be opportunities for teaching and training of graduate students. Applicants should send curriculum vitae, description of research interests and names of three references to: Dr. Diane Griffin, Department of Molecular Microbiolo gy and Immunology, 615 North Wolfe Street, Room 4013, Johns Hopkins University School of Public Health, Baltimore, MD 21205. The Johns Hopkins University actively encourages interest from women and minorities and is an Equal Opportunity/Affirmative Action Employer.

**PLANT SYSTEMATIST:** The Biology Department at the University of Michigan-Flint invites applications for an ASSISTANT PROFESSOR, tenure-track position beginning fall 1995. Primary teaching responsibilities in Plant Systematics and other botanical disciplines. Some horticultural experience preferred. Ph.D. by September 1995, demonstrated teaching ability, active research record, and broad training in biology. Selection review to begin February 1, 1995. Send résumé including course work and teaching areas, copies of recent publications and a list of at least three references to: Dr. Gary L. Pace, Department of Biology, University of Michigan-Flint, Flint, MI 48502-2186. This campus is a 6,000 student, urban regional unit of The University of Michigan. The University of Michigan-Flint is a Nondiscriminatory/ Affirmative Action/Equal Access Employer which specifically invites women and minorities to apply.

#### ASSISTANT PROFESSOR

The Department of Biology invites applications for a **TENURE-TRACK POSITION** for a Vertebrate Physiologist beginning fall 1995. A Ph.D. is required. The candidate is expected to teach undergraduate courses in comparative animal physiology, physiological ecology, first-year organismal biology, as well as to offer graduate courses in the area of specialty. Development of an active research program, pursuit of extramural support and supervision of M.S. students is also required. Submit résumé and three letters of reference by December 15, 1994, to: **Dr. Richard Fehn, Acting Chair, Department of Biology, California State University, 5500 University Parkway, San Bernardino, CA 92407. FAX: 909-880-7005.** An Equal Opportunity/Affirmative Action/Section 504, Title IX Employer.

#### CANCER BIOLOGY

Tenure-track position at the ASSISTANT PROFES-SOR level with appointments in the Markey Cancer Center and the Department of Pathology and Laboratory Medicine. An individual examining the role of genetic instability in the establishment and progression of cancer and who uses human tissues or an animal model is particularly sought. However, any individual with an outstanding research program in related areas of cancer biology will be considered. Interested persons should send curriculum vitae, a one to two page description of research interests, and the names and addresses of three persons who can serve as references: Dr. Deborah Powell, Department of Pathology and Laboratory Medicine, University of Kentucky College of Medicine, 800 Rose Street, Lexington, KY 40536-0093.

#### ASSISTANT PROFESSOR

The Department of Biology invites applications for a **TENURE-TRACK POSITION** for a Cell Biologist beginning fall 1995. A Ph.D. is required and a strong can didate would be expected to employ advanced molecular techniques. The candidate is expected to teach in introductory cell biology, cell physiology, participate in the genetic engineering certificate program, as well as graduate courses in the area of specialty. Development of an active research program, pursuit of extramural support and supervision of M.S. students is also required. Submit résumé and three letters of reference by December 15, 1994, to: Dr. Richard Fehn, Acting Chair, Department of Biology, California State University, 5500 University Parkway, San Bernardino, CA 92407. FAX: 909-880-7005. An Equal Opportunity/Affirmative Action/Section 504, Title IX Employer.

### MOLECULAR CELL BIOLOGIST ILLINOIS STATE UNIVERSITY

The Department of Biological Sciences seeks a Molecular Cell Biologist for a tenure-track **ASSISTANT PRO-FESSOR** position. Applicants should be able to maintain an independent extramurally funded research program utilizing molecular approaches to any area of cell biology, including development or neurobiology and behavior. The successful candidate should be able to direct M.S. and Ph.D. students and be able to teach cell biology and graduate courses in their specialty. To assure review of application, submit curriculum vitae, statement of research and teaching interests, recent reprints, and three letters of recommendation to: Cell Biology Search **Committee**, **4120 Department of Biological Sciences**, **Illinois State University, Normal, IL 61790-4120** by January 6, 1995. *Illinois State University is an Equal Opportunity/Afitmative Action Employer*.

PLANT SYSTEMATIST (Tenure-track; ASSIST-ANT/ASSOCIATE) to teach botany and genetics courses, screening begins 6 January 1995. Responsibilities: teach, conduct research, curate a teaching herbarium, advise students. Qualifications: Ph.D. in a related biological field, teaching experience, and research experience in molecular systematics, phylogeny, or evolution. Send cover letter addressing qualifications and experience in teaching and research, teaching philosophy and research interests; curriculum vitae; unofficial transcripts; and names, addresses, and telephone numbers of three references to: Dr. Michael Gleason, Biology, Central Washington University, Ellensburg, WA 98926-7537. This position is contingent on funding. Central Washington University is an Affirmative Action/Equal Opportunity Employer/ Title IX Institution, that is committed to increasing the diversity of its facilty.

#### FRANK K. RAMSEY ENDOWED CHAIR IN VETERINARY MEDICINE

The College of Veterinary Medicine at Iowa State University invites nominations and applications of internationally known **SCIENTISTS** with expertise in basic or applied science in a discipline in the field of veterinary medicine to be appointed to the recently endowed Frank K. Ramsey Chair in Veterinary Medicine. Applicants must have the D.V.M. and Ph.D. degrees or equivalent degrees and have exceptional credentials, including prior national and international recognition from renowned organizations, for research done on veterinary medical problems associated with agricultural animals. Candidates from all areas of specialization in the field of veterinary medicine will be considered. Responsibilities include establishing a strong externally funded research program, directing graduate students, and teaching graduate courses. Iowa State University is a center of food animal research and it is desired that the incumbent to this chair strengthen programs in food animal research through strong interaction with, and leadership for, other scientists in the food animal area at the University. This opportunity is a tenured, full professor position with a generous supplemental budget to support the appointee's research.

budget to support the appointee's research. Applicants should forward a curriculum vitae, a statement of research and teaching interests, and the names of references to: Dr. Gary D. Osweiler, Ramsey Search Committee Chair, Veterinary Diagnostic Laboratory, College of Veterinary Medicine, Iowa State University, Ames, IA 50011. Telephone: 515-294-1711. Review of applicants will begin November 30, 1994, and continue until the position is filled. *Iowa State University is an Equal Opportunity/Affirmative Action Employer.* 

## Director Trudeau Institute

The Trudeau Institute invites applications for the position of Director. The Institute, located in Saranac Lake, N.Y. is a privately endowed laboratory engaged in basic research in the field of Immunobiology at molecular, cellular, and physiological levels, with special emphasis on the responses of experimental animals to a variety of antigenic stimuli Including those provided by tumors, allografts, and pathogenic microorganisms. Total research space in the Institute amounts to 10,000 square feet. In addition there are several rooms equipped with micro isolator housing for small animals, a BioSafety Level 3 facility, and a 10,000 sq. ft. animal facility that breeds mice under specific pathogen free conditions, Candidates should have attained national and international stature 'in the field of experimental immunology, and should be actively involved in a full-time program of basic research. Inquiries and applications, which should include a current curriculum vitae, should be sent to:

> The Search Committee Trudeau Institute P. 0. Box 59 Saranac Lake, N.Y. 12983

## POSTDOCTORAL FELLOWSHIP

## Value Through Innovation

Together with all the Boehringer Ingelheim companies worldwide, Boehringer Ingelheim Pharmaceuticals is committed to Value through Innovation as our driving ambition. As a major international pharmaceutical company, we have made a commitment to innovation through world class R&D facilities, programs and scientific staff.

As a world leader in Cell Adhesion biology, we have an immediate opening for a postdoctoral fellow in the Department of Inflammatory Diseases. The selected candidate will join an ongoing project investigating the transcriptional regulation of inducible cell adhesion genes. Topics range from work on isolated transcription factors to functional studies on transcription factors in cells or transgenic animals. Candidates should have a recent Ph.D. in Molecular Biology, Cell Biology, or related field, possess a strong background in gene expression and recombinant DNA techniques, be highly motivated, and have good interpersonal and communication skills.

Boehringer Ingelheim's R&D facility is located in a campus-like setting in a beautiful area of Western Connecticut. Our state-of-the-art facilities offer rewarding and challenging avenues of research to ambitious individuals and our team-orientation provides the professional support and the nurturing environment befitting of a scientific institution.

For an opportunity to contribute to our innovative programs, please send your resume and a brief cover letter to: **Dept. DN-811, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877.** We are an equal opportunity

employer. As a progressive healthcare company, we have a nonsmoking environment.



# THE NEUROSCIENCES INSTITUTE La Jolla, California

THE NEUROSCIENCES INSTITUTE (NSI) IS AN INDEPENDENT, not-for-profit organization at the forefront of research on the brain. The NSI, located on the campus of The Scripps Research Institute in La Jolla, is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

## Fellow in Theoretical Neurobiology

A PPLICATIONS ARE INVITED FOR POSITIONS AS FELLOW IN Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Fellows will have daily opportunities to interact with NSI's Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral or assistant professor level with strong backgrounds in theoretical or experimental neuroscience or related fields. Positions are now available.

Fellows will receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, California 92037.

National Institute of Allergy and Infectious Diseases National Institutes of Health

## NIH Seeks Scientist/Physician

The Division of Allergy, Immunology and Transplantation (DAIT) is seeking an outstanding physician (M.D.) or scientist (Ph.D) or persons with equivalent training to serve as Program Officer for the Division's Genetics and Transplantation Branch. Candidates should have a strong research background in the fields of molecular or cellular immunology, genetics or immunogenetics.

Responsibilities include providing professional and scientific leadership on a broad array of activities necessary for the planning, evaluation, direction and coordination of the genetics and transplantation program. We offer a competitive salary and outstanding benefits.

This is a GS-13 position with a salary range up to \$73,472 per annum for physicians and \$62,293 per annum for non-physicians. Physicians comparability allowance up to \$20,000 may be applicable.

Personnel Office PHS/NIH/NIAID/DAIT Bidg. 31, Room 7A-20 9000 Rockville Pike Bethesda, MD 20892 Announcement No. AI-94-0088 Telephone No. 301-402-1421 FAX No. 301-496-1940 ATTN: Kristie Daniel



U.S. Citizenship required. NIH is an Equal Opportunity/Affirmative Action Employer

#### LINTON BISHOP PROFESSORSHIP IN HUMAN GENETICS Department of Genetics and Molecular Medicine Emory University Medical School

Through the generosity of Dr. Linton Bishop's family, the Department of Genetics and Molecular Medicine is searching for an internationally recognized **GENETI-CIST** who will hold the appointment as the Linton Bishop Professor of Human Genetics. Individuals specializing in gene therapy, the molecular basis of disease, or population and quantitative genetics are of special interest.

The Department of Genetics and Molecular Medicine occupies newly remodeled and equipped space which includes research laboratories, a diagnostic laboratory, a molecular histology laboratory, a developmental genetics laboratory, and a departmental genetics clinic. Within the context of the University's Clinical Research Facility, the department also has access to an ultramodern gene therapy suite which includes two operating rooms which communicate with a biohazard containment laboratory as well as three patient isolation rooms.

as three patient isolation rooms. Emory's suburban campus encompasses the Medical School, the undergraduate college, and three of five affiliated hospitals which draw patients from throughout the region.

Interested individuals should send their curriculum vitae and the names of three references to:

Douglas C. Wallace, Ph.D. Robert W. Woodruff Professor of Molecular Genetics Chairman, Department of Genetics and Molecular Medicine

Molecular Medicine 1462 Clifton Road, Room 446 Emory University School of Medicine Atlanta, GA 30322

Emory University is an Equal Opportunity/Affirmative Action Employer.

TERRESTRIAL PLANT ECOLOGIST at the AS-SISTANT PROFESSIONAL SCIENTIST level (fulltime, state-supported position). To develop a research program that: (1) incorporates ecosystem, community, and/or landscape scale processes, (2) has management implications for Illinois ecosystems, and (3) involves field work combining descriptive and experimental approaches. Expertise in GIS technology preferred. Ph.D. required. Send for complete job description. For full consideration, applications should be received by 16 December 1994. To apply, submit letter of application, résumé, and a statement of research interests, and arrange to have three letters of recommendation sent to: Ms. Jacqueline Sanders, Personnel Officer, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820. Telephone: 217-244-7790; FAX: 217-333-4949. Refer technical questions about position to Kenneth R. Robertson, Chair, address as above, 217-244-2171. Email: krrobert@uiuc.edu. The Illinois Natural History Survey is an Equal Opportunity and an Americans with Disabilities Employer.

FACULTY POSITION IN GENETICS—Duke University Medical Center. Applications are invited for a tenure-track position in the Department of Genetics at Duke University Medical Center. Although we anticipate filling this position at the ASSISTANT PROFESSOR level, we will consider individuals for any level appointment. We are particularly interested in those individuals that are engaged to work utilizing mammalian systems or focusing on the genetics of human disease. The facilities and environment of the Department of Genetics are excellent. Applications should include a curriculum vitae, a brief description of research accomplishments, a brief description of plans for future research, and the names of three individuals that can serve as referees. Address applications to: Genetics Search Committee, Department of Genetics, Duke University Medical Center, Box 3054, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

The Parkinson's Institute is recruiting a **DIRECTOR** for its new Molecular Biology Program. The major focus is on genetic factors in neurodegenerative disease. Demonstrated expertise in developing a multifaceted molecular biology laboratory and successful collaborative interactions with clinical and basic research disciplines preferred. Address inquiries to: **Caroline M. Tanner, M.D.**, **The Parkinson's Institute, 1170 Morse Avenue, Sunnyvale, CA 94089**.

## **POSITIONS OPEN**

#### EMORY UNIVERSITY

#### Dean of the Graduate School of Arts and Sciences

Emory University invites applications and nominations for the position of **DEAN** of the Graduate School of Arts and Sciences. Emory University currently enrolls approximately 10,000 students in nine schools, taught by 1,700 full-time instructional faculty, of whom 700 are graduate faculty. The Graduate School of Arts and Sciences enrolls 1,300 students and awards Master's and doctoral degrees in 23 departments and divisions. The Dean is responsible for providing academic leadership in all aspects of the graduate program and representing graduate studies within the administration of the University.

Candidates must have a record of teaching and scholarship commensurate with appointment to the rank of professor. Evidence of administrative interest and aptitude is required, as is commitment to rigorous graduate education.

Applicants should submit a letter detailing their interest and pertinent experience, together with a current curriculum vitae. Applications and letters of nominations should be sent to: Professor Thomas S. Burns, Chair, Graduate Dean Search Committee, Department of History, Bowden Hall, Emory University, Atlanta, GA 30322. The search committee will begin reviewing dossiers December 15, 1994.

Emory is an Affirmative Action/Equal Opportunity Employer.

## ASSISTANT PROFESSOR, NUTRITIONAL SCIENCES/HUMAN METABOLIC STUDIES

Division of Nutritional Sciences at Cornell University is seeking an ASSISTANT PROFESSOR, tenure-track, to develop a strong program in nutrition that relies on clinical/metabolic studies with human subjects in areas such as nutritional toxicology; micronutrient deficiencies and their control; nutrition and exercise or diet; genetic endowment, and human disease. Responsibilities include undergraduate and graduate teaching, and independent as well as collaborative research. Ph.D. and/or M.D. or equivalent degree required; registered dietitian desirable. Please send curriculum vitae and names of three references to: V. Utermohlen, M.D., Associate Professor, **Cornell University**, Division of Nutritional Sciences, **Savage Hall, Ithaca, NY 14853**. Application deadline January 20, 1995. *Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities*.

PROFESSOR of PSYCHIATRY and SCIENTIFIC DIRECTOR of the Psychiatric Institute at the University of Illinois at Chicago. Candidates are sought for leader of a research institute within the Department of Psychiatry. The Institute consists of several neuroscience laboratories; clinical psychopharmacology and mental health services research units; educational and training programs. The Institute is funded by substantial state support and is augmented by grant and contract funds. The director is expected to build a program integrating basic, clinical and services research and to develop consultation programs useful to the State Department of Mental Health. The candidate must have demonstrated the capacity to obtain external support or evidence of leadership roles in research enterprises, to develop and oversee research in diverse areas, and to establish an organized system which stimulates growth of young investigators. M.D. or M.D./ Ph.D. or equivalent. This is a full-time tenured position. Please submit curriculum vitae to: Markus Kruesi, M.D., and Mark Rasenik, Ph.D., Co-Chairs, Search Committee, Department of Psychiatry (M/C 913), University of Illinois at Chicago, 912 South Wood Street, Chicago, IL 60612-7327. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** (12-month, full-time position, one year duration with possibility of annual renewals at discretion of Director) to work on five-year NIH grant. Research includes on-cogene mutagenesis, molecular dosimetry, cancer dose-response, mechanisms of cancer inhibition. Opportunity for highly productive research, world-class facility, beautiful Willamette Valley setting. Closing date December 2, 1994, or until filled. Send letter of application, curriculum vitae, reprints, and have three letters of recommendation sent to: Dr. George Bailey, 232 Wiegand Hall, Oregon State University, Corvallis, OR 97331. Oregon State University is an Affirmative Action/ Equal Opportunity Employer and is responsive to dual-career needs.

## **POSITIONS OPEN**

#### WASHINGTON AND JEFFERSON COLLEGE FACULTY POSITION IN CELLULAR BIOLOGY

Washington and Jefferson College (W&J) seeks a regular, full-time, entry-level faculty member for the Biology Department. Applicants should have exceptional teaching skills and wide-ranging interests in biology, from molecular level to population biology. Teaching duties, at various times, will include general biology, cell biology, biochemistry, genetics, and molecular biology. Many W&J biology majors enter health-professional schools or graduate programs in biomedical research. The faculty member hired must work effectively with such students as teacher. a chiever and wild to mudareraduate are

Many W&J biology majors enter health-professional schools or graduate programs in biomedical research. The faculty member hired must work effectively with such students as teacher, adviser and guide to undergraduate research opportunities. A Ph.D. is preferred; ABD and demonstrated excellence in undergraduate teaching are required.

Applicants should submit a letter of interest, a résumé and a short statement of educational philosophy and current research interests, and should arrange for three letters of reference to be sent to the **Dean of Academic Affairs**, **Biology Search, Washington and Jefferson College**, **Washington, PA 15301**. The application deadline is December 15, 1994.

Washington and Jefferson College, a private, co-educational undergraduate liberal arts college of 1,200 students, is located in Washington, Pennsylvania, a mediumsized city 30 miles south of Pittsburgh. *WEJ is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority professionals are encouraged.* 

#### DEPARTMENT OF ZOOLOGY UNIVERSITY OF NEW HAMPSHIRE

Applications are invited for two tenure-track faculty po-sitions. We seek a MARINE ANIMAL ECOLOGIST with a strong background in ecological theory, experimental design and quantitative analysis whose research focuses on estuarine and/or near shore coastal systems. We seek a CELL/DEVELOPMENTAL BIOLOGIST whose primary research focus is the molecular analysis of signal transduction pathways; candidates using Drosophila, C. elegans, or zebrafish or marine model systems are particularly encouraged to apply. Active involvement in research and graduate education, and a strong commitment to undergraduate teaching are expected. Teaching responsibilities are normally one large course, an advanced specialty course, and a graduate seminar each year. The University of New Hampshire has strong programs in marine research and education supported by excellent facilities. Review of applications will begin January 1, 1995. Submit curriculum vitae, names of four references, and statements of research and teaching interests to: Faculty Search Committee, Department of Zoology, University of New Hampshire, Durham, NH 08324. The University of New Hampshire is an Equal Opportunity/Affirmative Action Employer, and encourages applications from women and minorities.

#### COGNITIVE NEUROSCIENCE

The Department of Psychology at Carnegie Mellon University (CMU) and the CMU-Pitt Center for the Neural Basis of Cognition seek a FACULTY MEMBER of any rank who studies the neural mechanisms underlying cognitive processes. We seek an individual with an interest in bringing physiological and behavioral techniques and findings together to further the development of explicit mechanistic accounts of cognitive functions such as perception, memory, language, problem solving, control and planning of action, etc. We especially encourage candidates who study brain activity during performance of cognitive tasks in humans or non-human primates. Applications should be sent to: James L. McClelland (Chair), Psychology/CNBC Search Committee, Department of research and teaching interests, a curriculum vitae, copies of publications, and three letters of reference. The deadline for initial consideration is January 1, 1995, though applications arriving after that date may be considered. Camegie Mellon University is an Equal Opportunity/Affinnative Action Employer. Women and minority candidates are especially encouraged to apply.

**POSTDOCTORAL POSITION** available immediately to study transcription factors involved in small intestinal epithelial differentiation. Experience in molecular biology is essential. Please send curriculum vitae along with the names and addresses of two references to: **Richard A. Hodin, M.D., Department of Surgery, Beth Israel Hospital, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215 or FAX to 617-278-7756.** An Affirmative Action/Equal Employment Opportunity.

## EXECUTIVE DIRECTOR Office of International Affairs

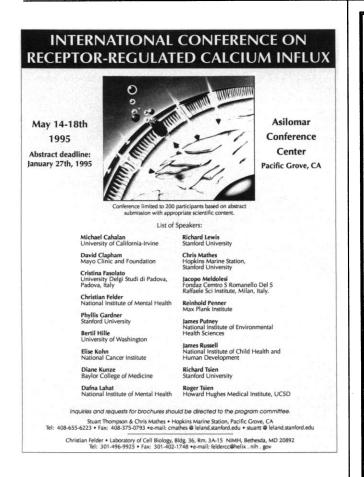
The National Research Council (NRC), the principle operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government organization located in Washington, D.C., invites applicants for the position of Executive Director of the Office of International Affairs (OIA). OIA activities include international programs which examine relevant science and technology policy issues, including those concerned with scholarly communication, effective uses of science and technology in sustainable development, and security and world peace. OIA also is responsible for coordination and communication with other units of the National Research Council to the extent that they are engaged in international activities. A staff of approximately 35 professionals support the work of the OIA.

The Executive Director in cooperation with the OIA Chairman and Executive Board, manages the OIA as one of nine major program units of the NRC, including all scientific, financial, and administrative operations of the unit, in coordination with cognizant chairmen and subject to the policy directives of the Chairman, Vice Chairman, and Executive Officer of the NRC. The incumbent plans and oversees the ongoing program of technical activities and studies, supervises staff, and is expected to stay abreast of major developments. The OIA Executive Director identifies emerging problems and opportunities for policy analyses and responds to public and private requests for studies and information. Applicants should have the following qualifications: Ph.D. or equivalent in areas related to international affairs and at least 10 years experience related to (1) analysis of international science and technology policy issues; (2) participation of U.S. scientists in international organizations and programs; (3) U.S. scientific cooperation, exchanges, and policy studies with other countries; and (4) the U.S. scientific community in effective technical assistance to and cooperation with developing nations. Substantial leadership experience in program development, policy analysis, policy formulation, staff management, and project quality assurance is required. Familiarity with the role of the U.S. government in supporting and using research in areas of international affairs, contracts and grants procedures, and with institutions of higher education and industry is required. Candidates must also have demonstrated knowledge of staff and financial management, and effective oral and written communication skills.



Please send resume in confidence to: National Research Council Human Resources, GR 146 (OIA/ED-SC) 2101 Constitution Avenue, NW Washington, DC 20418

An Equal Opportunity Employer



## FACULTY POSITION MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology of the City University of New York Medical School invites applications for a tenure-track position at the level of Assistant or Associate Professor. Candidates are expected to have a Ph.D. or M.D. degree, or equivalent and to have completed appropriate postdoctoral training with a demonstrated record of significant research accomplishments. Individuals with experience in molecular or cellular immunology, virology, parasitology, or infectious disease will be considered for the position. Teaching responsibilities include medical students, physician's assistants and graduate students.

The Department has strong and diverse research interests and interacts with other University Departments at the Medical School and other CUNY campuses. Faculty have access to a wide variety of state-of-the-art facilities. Funds for initiation of the research program of the successful candidate will be available. Salary range: \$42,167-64,816 (Assistant Professor); \$52,244-\$75,297 (Associate Professor) commensurate with experience.

Interested individuals should send a curriculum vitae, copies of recent publications, a brief statement of future research goals and three letters of reference by February 1, 1995 to: Dr. Richard Coico, Chairman, Department of Microbiology and Immunology, CUNY Medical School, J913



## **CITY COLLEGE OF NEW YORK** 138th Street and Convent Avenue New York, NY 10031

The City College of New York has a strong commitment to the principle of diversity. In that spirit we are particularly intersted in receiving applications from a broad spectrum of people, including women and under-represented groups. Reasonable accommodations provided for individuals with disabilities upon request.

The City University of New York is an AA/EO Employer M/F/D/V



Wayne State University

The Department of Surgery at Wayne State University, School of Medicine invites applications for a FACULTY POSITION, rank to be determined. A Ph.D. or M.D./ Ph.D. required. Two years of postdoctoral experience is required. Faculty members are expected to establish a vigorous independent research program and to participate in teaching graduate medical and postdoctoral students. Send curriculum vitae to:

> David Fromm, M.D. Professor and Chairman Department of Surgery Wayne State University 6C-UHC, 4201 St. Antoine Detroit, MI 48201

#### VIRGINIA COMMONWEALTH UNIVERSITY CHAIRPERSON Department of Anatomy

The Medical College of Virginia/Virginia Commonwealth University (MCV/VCU) School of Medicine is seeking a **CHAIRPERSON** for the Department of Anatomy. The Department has 20 full-time faculty and major research strengths in neuroscience, immunobiology and reproductive biology. It is involved in formal instruction in the anatomical disciplines to medical, other professional, and undergraduate students, and it has a dynamic and large graduate training program. Candidates for the Chair should have a Ph.D. and/or M.D. degree; should be internationally renowned for scholarly accomplishments in contemporary cell, molecular, or neurobiology; should have leadership and administrative skills; and should be committed to vigorous support of research as well as excellence in teaching. Experience working in an academic medical center is preferred.

Applicants should submit a letter of interest, curriculum vitae and a list of three to five references by January 15, 1995, to: George Kunos, M.D., Ph.D., Chair, Search Committee, Department of Pharmacology and Toxicology, MCV/VCU, Box 980613, Richmond, VA 23298.

VCU is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.

#### WEST VIRGINIA SCHOOL OF OSTEOPATHIC MEDICINE IMMUNOLOGY FACULTY POSITION

Tenure-track faculty position at **ASSISTANT** or **AS-SOCIATE PROFESSOR** level. Position requires a Ph.D. in immunology or microbiology with immunology specialty.

Prior teaching experience required. Teaching responsibilities are immunology and team-taught medical microbiology to medical students. Research opportunities available.

Applicants should submit a letter describing teaching and research experience and interests, curriculum vitae, names and addresses of three references to: Chairperson, Microbiology Search Committee, Human Resources Office, WVSOM, 400 North Lee Street, Lewisburg, WV 24901. Applications will be accepted until the position is filled. An Equal Employment Opportunity/Affirmative Action Employer.

A position in Theoretical Chemistry at the University of Houston is open for applicants at all levels. The position is **TENURE-TRACK** or tenured in a department with several active faculty in theoretical chemistry. At the junior faculty level, postdoctoral experience is required and applicants will be expected to have strong potential in research and a commitment to education at all levels. Applicants for a tenured position are expected to have an established reputation in research, education and service. Preference will be given to applicants whose field complements current strengths in theoretical chemistry at this Department. Please send a curriculum vitae, research plans and three letters of recommendation by January 1, 1995, to: Prof. B. M. Pettitt, Department of Chemistry, University of Houston, Houston TX 77204-5641. The University of Houston is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans and persons with disabilities are encouraged to apply.

## **POSITIONS OPEN**

#### POSTDOCTORAL POSITIONS NEUROBIOLOGY RESEARCH CENTER UNIVERSITY OF ALABAMA AT BIRMINGHAM SCHOOL OF MEDICINE

Four **POSTDOCTORAL POSITIONS** available for NIH-supported Research Center to study basic cellular and molecular mechanisms of development of the mam-malian cerebral cortex. Five laboratories (**Drs. M. J.** Friedlander, C. C. Garner, J. J. Hablitz, H. W. Sontheimer and A. B. Theibert) have collaborative re-search projects to use state-of-the-art cellular and molecular approaches to study: 1) the role of glutamate and calcium in synaptic function and excitotoxicity; neuro-nal/glial interactions and their role in ion channel expression; 3) the role of diffusible signals in regulating synaptogenesis; and 4) the function of novel synapse associated proteins. Candidates should have training in either biophysics, molecular or cellular neurobiology and an interest in nervous system development. Please send curriculum vitae and three letters of reference to: Dr. Michael I. Friedlander, Neurobiology Research Center, University of Alabama at Birmingham School of Medicine, 1719 6th Avenue South, CIRC 516, Birmingham, AL 35294-0021 USA by January 1, 1995. The University of Alabama at Birmingham is an Affirmative Action/Equal Op portunity Employer.

#### YALE UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITION IN IMMUNOBIOLOGY

The Section of Immunobiology headed by Richard A. Flavell includes A. Bothwell, K. Bottomly, P. Cresswell, I. N. Crispe, S. Ghosh, A. Hayday, C. A. Janeway, Jr., P. Kavathas, E. Pamer, J.S. Pober, N. Ruddle, D. Schatz, M. Shlomchik and R. Tigelaar. POSTDOCTORAL POSITIONS in antigen processing, T/B cell and lymphoid organ development, gene regulation, T cell apoptosis, recognition and molecular interactions, activation, function, cytokines, V(D)J recombination, and disease related research in autoimmunity, Lyme disease, transplantation, and AIDS are available. Please send curriculum vitae, statement of interest and three letters of reference by February 15, 1995, to: Terrill Moorehouse, Administrator, Section of Immunobiology, Room TE-404, 310 Cedar Street, P.O. Box 208011, New Haven, CT 06520-8011. Yale University is an Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATES in Neuroendocrinology. Ph.D. in molecular biology, genetics, neuroscience, or biochemistry to join a lab that uses interdisciplinary approaches to investigate the biology of neuroendocrine systems. Current NIH-funded studies focus on the interaction of the endogenous opioid systems with the hypothalamic-pituitary-adrenal and gonadal axes. The lab maintains a large transgenic component including gene targeting by homologous recombination in embryonic stem cells and commonly uses expression systems for cDNA cloning, in situ hybridization, and a range of biochemical and behavioral assays of gene function in mice. The positions require previous evidence of excellence in the candidate's field and a working knowledge of molecular biology. Send letter, curriculum vitae, and names of three references to: Dr. Malcolm Low, Vollum Institute, L474, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201. An Equal Opportunity/Affimative Action Employer.

POSTDOCTORAL POSITION available immediately to study structure-function relationships in bacterial transport proteins and/or the regulation of bacterial nutrient transport. The salary is negotiable, depending on experience, and an excellent benefits package is also available. Applicants should have a strong background in biochemistry and/or molecular biology. Please send curriculum vitae, and arrange to have three references sent, to: Dr. Gary R. Jacobson, Department of Biology, Boston University, 5 Cummington Street, Boston, MA 02215. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study interactions of the ribosome with antibiotics. Candidates should have experience with *in vitro* RNA manipulations. Send curriculum vitae and three letters of reference to: Dr. Alexander Mankin, Center for Pharmaceutical Biotechnology, m/c 781, University of Illinois, 833 South Wood Street, Chicago, IL 60612. Email: shura@uicvm.uic.edu. The University of Illinois at Chicago is an Afjirmative Action/Equal Opportunity Employer.

#### **POSITIONS OPEN**

#### DIELECTRIC STUDIES OF CANCER CELLS

Two POSTDOCTORAL POSITIONS are available immediately in a multidisciplinary group actively applying dielectric principles to the study of cell structure/function relationships in normal and cancerous cells. This program involves analyzing dielectrophoretic and electrorotational properties of cells, and exploiting differences between cell types both for phenotypic characterization and cell sort-ing. Emphasis is also placed on the development of new technology for achieving these aims. Applicants must have a Ph.D. in biophysics, physics or engineering, with a strong background in one or more of the following: Dielectric measurements of aqueous or biological systems; application of dielectric and static theories, high-frequency analog circuit design; or software development in Fortran or C for electrical field calculations or for image analysis and pattern recognition. Send curriculum vitae and the names of three references to: Peter Gascoyne, Ph.D., Department of Molecular Pathology, Box 89, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030. FAX: 713-792-5940. An Equal Opportunity Employer. Smoke-free environment.

## POSTDOCTORAL RESEARCHERS

The Department of Physiology and Biophysics, University of California, Irvine, is developing a postdoctoral candidate pool for possible openings during the remainder of the 1994–1995 fiscal year. Openings may be available in the following research areas: ion channels in lipid bilayers; physical chemistry of membranes; mechanisms and regulations of steroid hormone biosynthesis; exercise physiology; molecular properties of ion channels in excitable cell membranes; molecular and electrophysiological aspects of lymphocyte activation. Salary is in accordance with current NIH/NSF postdoctoral stipends which are based upon qualifications and years of prior, relevant postdoctoral experience. Minorities and women are encouraged to apply. Send curriculum vitae and names of three references to: Michael D. Cahalan, Ph.D., Chairman, Department of Physiology and Biophysics, University of California, Irvine, Irvine, CA 92717. The University of California, Irvine is an Affirmative Action/Equal Opportunity Employer.

## GENE THERAPY WITH AAV VECTORS

A POSTDOCTORAL POSITION is available immediately at the University of Florida Gene Therapy Center in the laboratory of Dr. Nicholas Muzyczka. The applicant will have the opportunity to work on one or more of the following projects: 1) Adapting adeno-associated viruses for human gene transfer in several different disease models; 2) Study of *in vitro* AAV DNA replication and viral packaging systems; or 3) Development of advanced methods for packaging AAV recombinant virus. The applicant should have an M.D. or Ph.D. degree. Please send résumé and arrange for three letters of reference to be sent to: Dr. N. Muzyczka, Professor, Department of Immunology and Medical Microbiology, University of Florida, P.O. Box 100266, Gainesville, FL 32610-0266.

#### POSTDOCTORAL POSITION ENZYMOLOGY OF DNA REPAIR

A POSTDOCTORAL POSITION is available for a highly motivated individual to be part of a group working on the role of DNA Repair in human tumor cells. Emphasis will be on the purification and characterization of human enzymes involved in DNA Repair and on studies to compare levels of these enzymes in normal versus tumor cells. The candidate will have a Ph.D. or the equivalent and should have demonstrated expertise in protein purification, enzymology and molecular biology. Send curriculum vitae, statement of research interests and names of three references to: Mary Jeannette, The DuPont Merck Pharmaceutical Company, Postdoctoral Program, Position No. 94-KEA, P.O. Box 80353, Wilmington, DE 19880-0353.

**POSTDOCTORAL POSITION** available January 1995 at Analytical Biological Services Inc., a rapidly growing entrepreneurial company that supplies most pharmaceutical and biotechnology companies with biochemical preparations. Candidate must have Ph.D. in biological sciences. Experience with receptor binding and ELISA's is desirable. Competitive salary and benefits, plus the possibility of rapid advancement for the right individual. Send curriculum vitae to: Dr. Charles Salier, ABS Inc., P.O. Box 273, Rockland, DE 19732.

## Molecular Diagnostics

## Sr. Research Scientist

Bio-Rad Laboratories is a world leader in the fields of life science research products, clinical diagnostics and analytical instruments. Our continued growth has created a need for a dynamic scientific professional to work in our Molecular Diagnostics Division.

The successful candidate will have an MS or PhD in Molecular Biology or Biochemistry with 3+ years experience in nucleic acid technology and DNA amplification methodology. Experience in product development and strong writing skills desired.

For consideration, please send your resume to: Bio-Rad Laboratories, 2000 Alfred Nobel Dr., Dept. 594, Hercules, CA 94547. EOE MFDV.



Bio-Rad Laboratories

National Institutes of Health 

National Institute of Allergy and Infectious Diseases
Division of Acquired Immunodeficiency Syndrome

Announcement #AI-94-084

## ASSOCIATE DIRECTOR VACCINE PREVENTION AND RESEARCH PROGRAM

Location: Bethesda, Maryland

The Division of AIDS, NIAID/NIH, is seeking an Associate Director for its newly established Vaccine and Prevention Research Program. This individual is responsible for overall scientific leadership and management in the areas of HIV/AIDS vaccines and other biomedical and behavioral interventions for the prevention of HIV/AIDS. The Program includes the Division's complex and broad ranging extramural activities of U.S. domestic and overseas preclinical and clinical research and development.

Desirable qualifications include a Ph.D and/or M.D. degree, extensive postgraduate research experience, and demonstrated ability to direct and lead a biochemical research effort. U.S. citizenship is required.

This is a GS-15 Civil Service position. A recruitment or relocation bonus of up to 25% of base pay may be available. Physicians may be eligible for a Physician's Comparability Allowance of up to \$20,000 per year. Salary range - \$66,609 to \$86,589.

Selection for this position will be based solely on merit with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, disability, age, or sexual orientation.

Persons interested in this position may contact Dr. John Y. Killen, Director, DAIDS, at 301-496-0545. Applicants should submit an SF-171, Application for Federal Employment, and a curriculum vitae by December 20, 1994 to: Ms. Shelia Conner, NIAID Personnel Office, Solar Building, Rm. 4B15, Bethesda, MD 20892-7620 (301-402-0957).

NIH is an Equal Opportunity Employer



## **VACANT RESEARCH APPOINTMENTS 1995**

Applications are invited for about 35 Royal Society University Research Fellowships, tenable in the first instance for five years from 1 October 1995 (or later in the academic year 1995-96). Renewals of three years and then a further two may be possible. The appointments available embrace all branches of science, including agriculture, medicine, mathematics, engineering and technology.

Research Fellows are paid on the academic and academic-related staff (Lecturer A and B) salary scale which currently runs from £14 756 (age 26) to £25 735 (age 39) plus three additional discretionary points up to £28 765. Starting salaries will be on this scale, with London Allowance where appropriate, and will rise incrementally each year. A limited number of merit increments will be awarded each year to reward outstanding performance. Annual research expenses (up to about £11 000 for 1995–96) will be available together with travel expenses and a contribution to baggage costs for successful applicants from overseas and their families.

Applicants must have a Ph.D. or equivalent research experience. They should be at least 26 but not have passed their 40th birthday by 1 October 1995 and have between two and seven years postdoctoral experience. Applicants over 40 may be considered under very exceptional circumstances; they should contact the Research Appointments Department at The Royal Society for advice before submitting an application. Fellowships must be held in a university in the United Kingdom. Those already holding substantive posts in a UK university will not be considered. University Research Fellowships are open only to European Community citizens who are either employed in the UK or who, if not employed, have been resident in the UK for a continuous period of three years other than for the sole purpose of receiving full-time education.

Application forms and further information are available from the Research Appointments Department, The Royal Society, 6 Carlton House Terrace, London, SW1Y 5AG (Fax 0171-930 2170). Closing date 17 February 1995. Application forms are not available after 3 February 1995 and applications arriving after 4 p.m. on 17 February will not be considered.

## THE OHIO STATE UNIVERSITY College of Medicine

## Chairperson, Department of Medical Biochemistry

The Ohio State University College of Medicine invites applications and nominations for the position of chairperson of the Department of Medical Biochemistry. The department has 16 full-time faculty recognized for research strengths in cellular, molecular, and physical biochemistry. It participates in the education of medical and dental students and in an integrated biochemistry graduate program comprised of biochemists in departments and centers throughout The Ohio State University Campus. Medical Biochemistry is one of five basic science departments in the College of Medicine. The College is part of a nationally ranked comprehensive health sciences center.

A Ph. D. and/or M.D. or equivalent degree and qualifications for appointment at the rank of professor are required. The successful candidate will also have a distinguished record of scholarly productivity, an internationally recognized research program, aptitude for administering an integrated academic program, and demonstrated leadership and organizational skills. Any area of research specialization in biochemistry will be considered, including multidisciplinary orientation to the molecular basis of disease.

Applications and nominations should be received by February 1, 1995 to receive full consideration. The search will continue until the position is filled. Materials, including an application letter, full survival writes and the parene and editors are seen as the second second

curriculum vitae, and the names and addresses of four references, should be directed to: Jackie D. Wood, Ph.D., Chair, Search Committee, Dept. of Physiology, 300 Hamilton Hall, 1645 Neil Avenue, Columbus, Ohio 43210.

The Ohio State University is an affirmative action/ equal opportunity employer. Women and underrepresented minorities are encouraged to apply.



#### POSTDOCTORAL POSITION Cardiac Physiology University of Maryland School of Medicine

A **POSTDOCTORAL POSITION** is available immediately (January 1995) for research in electrophysiology and excitation-contraction coupling of cardiac muscle. The research will involve the use of patch clamp techniques (whole cell and single channel) and fluorescent ion-indicators, including confocal microscopy, and flash photolysis of caged compounds in single voltage-clamped cardiac cells. Applicants should have a Ph.D. or M.D. and experience in electrophysiology. Interested individuals should send curriculum vitae and

Interested individuals should send curriculum vitae and names of three references to: Dr. W. Gil Wier or Dr. C. William Balke, Department of Physiology, University of Maryland at Baltimore, 655 West Redwood Street, Room 590, Howard Hall, Baltimore, MD 21201.

#### POSTDOCTORAL AND PREDOCTORAL TRAINING IN NEURAL PROCESSES IN COGNITION

Opportunities for investigating cortical function at multiple levels of analysis. This is a joint program between the University of Pittsburgh, its School of Medicine, and Carnegie Mellon University. Applications are encouraged from individuals with interest in biology, psychology, engineering, physics, mathematics, or computer science. Postdoctoral applicants must be permanent U.S. residents. Application deadline is February 1, 1995. For information contact: Walter Schneider, Program Director, Neural Processes in Cognition, University of Pittsburgh, 3939 O'Hara Street, Pittsburgh, PA 15260. Telephone: 412-624-7061; Email: neurocog @vms.cis.pitt.edu.

## MOLECULAR BIOLOGY POSTDOCTORAL/RESEARCH ASSOCIATE

Position available to study the regulation of gene expression during differentiation of male germ cells. Possible research projects include but are not restricted to: trans-acting factors that regulate meiotic- and post-meiotic transcription; RNA-binding proteins that regulate translation; and defining the functions of testis-specific isozymes. Salary will be commensurate with applicant's experience. Training and experience in molecular biology or protein biochemistry is desirable.

Please send curriculum vitae and names and addresses of three references to: Norman B. Hecht, Department of Biology, Tufts University, Medford, MA 02155.

MOTILITY AND METASTASIS: A POSTDOC-TORAL POSITION is available immediately to dissect the role of cell motility in the metastatic spread of mammary adenocarcinoma (breast cancer) cells in a collaboration between the laboratories of Drs. J. Segall and J. Condeelis. The work will utilize a combination of biochemical, molecular genetic and cell biological approaches focusing on the cytoskeleton. Submit curriculum vitae and names of three references to: Dr. Jeffrey E. Segall, Department of Anatomy and Structural Biology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. An Equal Opportunity Employer.

#### POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY/BIOANALYTICAL CHEMISTRY

The Bioanalytical Chemistry Group at the University of Kentucky has openings for **POSTDOCTORAL FEL-LOWS** with experience in Molecular Biology to conduct research on projects (funded by NASA and NIH) involving photoproteins and periplasmic binding proteins in bioseparations, immunoassays and sensors. Send curriculum vitae and names of three references to: **Dr. Sylvia Daunert, Department of Chemistry, University of Kentucky, Lexington, KY 40506. FAX: 606-323-1069; Email: sdaun00@ukcc.uky.edu**.

**POSTDOCTORAL POSITION** available to study the biological and biochemical function of a tumor suppressor gene in a model of hereditary cancer in the rat. Background in molecular biology and biochemistry or development is desired. Please send curriculum vitae and names and references to: Dr. Raymond Yeung, c/o Human Resources, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

## **POSITIONS OPEN**

#### POSTDOCTORAL POSITION

Applications are invited for a two-year position at the **POSTDOCTORAL LEVEL**. This position is available immediately in Pharma Research, department of Biotechnology. The research will focus on genome analysis and mapping of genes relevant to neurodegenerative diseases and tumor development. The successful candidate is expected to have a strong background in molecular and cellular biology. Experience in positional cloning would be an advantage.

To apply send a full curriculum vitae to: Dr. U. Spaeti, Personnel Department, CIBA-GEIGY AG, CH-4002 Basel, Switzerland.

#### POSTDOCTORAL RESEARCH ASSOCIATE

Will conduct research on and study role, relationship and function of genes within introns and significance of highly conserved introns in a baculovirus and polydnavirus. Successful applicant will study and apply most aspects of recombinant nucleic acid and baculovirus expression vector techniques. For studies of protein structure pursuant to function, emphasis will also be on recombinant and expression vector technologies. Starting at \$25,000, negotiable commensurate with experience. Please send résumé and three references to: Dr. Max Summers, Texas A&M University, Department of Entomology, College Station, TX 77843-2475. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

#### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study mechanisms of neuronal cell death in AIDS. Project involves studies on mechanisms of neuronal degeneration and effects of HIV on microglia and astrocytes. Experience in cell/molecular biology or neuroscience is required. Send curriculum vitae, brief description of research experience, and names of three references to: Dr. Dana Gabuzda, Dana-Farber Cancer Institute, JF712, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3113. An Equal Opportunity Employer.

#### POSTDOCTORAL POSITION IN DEVELOPMENTAL NEUROBIOLOGY

Position available to study neuronal differentiation and formation of synaptic pathways in the rat spinal cord. Candidates with experience using intracellular recordings and/or calcium imaging are preferred. Send curriculum vitae and three letters of reference to: Dr. Lea Ziskind-Conhaim, Department of Physiology and Center for Neuroscience, 129 SMI, 1300 University Avenue, University of Wisconsin Medical School, Madison, WI 53706. Telephone: 608-263-3382; FAX: 608-265-5512.

## POSTDOCTORAL POSITION DIVISION OF PEDIATRIC ONCOLOGY

The projects in the laboratory are focused on understanding the assembly and cell cycle regulation of components of the yeast mitotic spindle. The work involves molecular biology, cell biology and biochemistry. M.D. or Ph.D. is required. Send curriculum vitae and three letters of recommendation to: Dr. David Pellman, Division of Pediatric Oncology, D1840, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in a laboratory studying the molecular basis of drug resistance to inhibitors of DNA topoisomerase II and the control of enzyme activity by phosphorylation. Qualifications include Ph.D. or M.D. with a strong background in biochemistry, molecular biology or cell biology. Send curriculum vitae and names of three references to: Dr. Daniel M. Sullivan, J. G. Brown Cancer Center, 529 South Jackson Street, University of Louisville, Louisville, KY 40292. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available for NIHfunded study of molecular basis of metal resistance. Suburban location. Requires Ph.D. in Molecular Biology or related field. Experience in cell culture, plasmid construction, PCR, cloning, sequencing, and expression vectors preferred. Send curriculum vitae and three references to: Dr. Toby G. Rossman, The Nelson Institute of Environmental Medicine, NYU Medical Center, Long Meadow Road, Tuxedo, NY 10987. An Equal Opportunity Employer.

## **POSITIONS OPEN**

#### POSTDOCTORAL/RESEARCH ASSOCIATE POSITION

Available for the study of human molecular genetics of inherited ophthalmic diseases. Current research includes: Linkage mapping, mutation analysis, SSCP, DGGE, Cosmid Contig maps, selective hybridization cloning, library screening, apoptosis research, gene transfer studies. Send curriculum vitae and names, telephone and Email addresses of three references to: Kent W. Small, M.D., Associate Professor, Doris Stein Eye Research Center, 200 Stein Plaza–UCLA, Los Angeles, CA 90024-7007. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE position is available immediately to study molecular aspects of viral induced autoimmune encephalomyelits. Recent Ph.D.'s with interest in T cell cloning and epitope mapping and some knowledge in virological techniques are encouraged to apply. Excellent salary and fringe benefits. Interested individuals should send résumé and names of three references to: Dr. F. Mokhtarian, Associate Professor and Director of Immunology/Virology Research at SUNY, Health Science Center and Maimonides Medical Center, 4802 Tenth Avenue, Brooklyn, NY 11219. An Equal Opportunity Employer.

#### FELLOWSHIP IN VISION SCIENCE

Predoctoral and postdoctoral **RESEARCH FEL-**LOWSHIPS are available at the University of Florida College of Medicine through an NIH, National Eye Institute Training Grant. Research emphases are in vision cell biology, molecular biology, and biochemistry. The 12 faculty preceptors maintain primary appointments in the Departments of Anatomy and Cell Biology, Biochemistry and Molecular Biology, Molecular Genetics and Microbiology, Neuroscience, Pathology, and Pharmacology. Inquiries for complete program description and application forms should be sent to: Dr. William Hauswirth, Box 100284, University of Florida, Gainesville, FL 32610-0284. Applications will be accepted at any time, but decisions are normally made in April/May for August admission. U.S. citzens or legal residents only. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP in Aging and Muscle Function. Postdoctoral position available immediately to study molecular and cellular alterations in skeletal muscle related to aging. This position is part of a multidisciplinary program on aging and is supported by a National Institute on Aging training grant. Interested candidates must have a doctoral degree and expertise in muscle physiology. Interested candidates should send a curriculum vitae and three letters of reference to: Osvaldo Delbono, M.D., Ph.D., Department of Internal Medicine, Bowman Gray School of Medicine of Wake Forest University, Medical Center Boulevard, Winston-Salem, NC 27157-1051. Wake Forest University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

#### POSTDOCTORAL FELLOW ASSISTANT RESEARCH SCIENTIST

Department of Molecular and Medical Genetics at Oregon Health Sciences University, Portland, Oregon for studies on the molecular basis of Fanconi anemia. An annual appointment. Studies depend on protein purification, cell culture, and molecular genetics techniques. Please send curriculum vitae and name of three references to: Dr. Robb Moses, Chair, Department of Molecular and Medical Genetics, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201. An Affirmative Action/ Equal Opportunity Employer.

#### **RESEARCH FELLOWSHIPS**

NIH-funded **POSTDOCTORAL FELLOWSHIPS** available to study the cellular and molecular basis of: immunologic, ischemic and toxic renal diseases; macrophages in autoimmunity; receptor biology and renal cell physiology. U.S. citizenship or permanent resident alien status required. Cell and/or molecular biological experience is desirable. Send letter, curriculum vitae and three references to: Dr. David Salant, Renal Section, Boston University Medical Center, Boston, MA 02118. FAX: 617-638-7326. Equal Opportunity Employer. Applications from women and minorities are strongly encouraged.

## **POST-DOCTORAL RESEARCH PROGRAM**

The Institute for Genomic Research is a not-for-profit research institute devoted to sequencing, mapping, and functional characterization of human, animal, bacterial, and plant genomes. Research at TIGR is funded through grants from Human Genome Sciences, Inc., National Institutes of Health, Department of Energy, and National Science Foundation. The goal of TIGR is to bring scientists together in a collaborative environment to identify and characterize novel genes and gene families through the application of DNA sequence analysis, bioinformatics, gene expression and model organism studies. TIGR encourages collaborations and supports visiting fellows and faculty members. Departmental research at TIGR is supported by a large-scale DNA sequencing facility with state-of-the-art robotics and a computational facility centered around three MasPar massively parallel computers. TIGR scientists are developing a new generation of public biological databases to organize the data generated by cDNA and genomic sequencing. A new campus with more than 60,000 sq. ft. of laboratory and office space is under construction with an anticipated occupancy date of fall 1995. We are currently recruiting post-doctoral fellows to work with faculty members in the following areas:

## •Microbial Genomics (Faculty: Carol J. Bult, Robert D. Fleischmann, Joseph Merrick)

TIGR is the recipient of a 3 year, \$6.7 million DOE Small Genome Initiative grant. Post-doctoral fellows will assist in sequencing, assembly, and comparative analysis of complete microbial genomes, beginning with the archaebacterium, *Methanococcus jannaschii*. Applicants are eligible to compete for DOE Distinguished Postdoctoral Fellowships.

## •Human Disease Gene Discovery (Faculty: Mark D. Adams, Keith Weinstock)

Post-doctoral fellows will participate in large-scale sequencing and analysis of human genomic regions implicated in several inherited diseases now under study at TIGR. TIGR's database of over 200,000 ESTs will be used to facilitate isolation of candidate genes for functional characterization and identification of mutations.

## •Signal Transduction (Faculty: Claire M. Fraser, Ewen F. Kirkness, Norman H. Lee)

Post-doctoral fellows will have opportunities to participate in ongoing studies at TIGR focused on discovery of novel growth factors, ligand-gated ion channels, and G protein-coupled receptors, analysis of receptor/gene structure, and characterization of transcriptional/translational mechanisms controlling receptor gene expression.

## •Cancer Biology (Faculty: Rebecca A. Fuldner)

Comparative EST analysis is being utilized to identify global differences in gene expression associated with normal, malignant, and metastatic phenotypes in a variety of human cancers. Post-doctoral fellows will participate in analysis and biological characterization of novel therapeutic targets and cellular markers of transformation.

## •Computational Biology (Faculty: Anthony R. Kerlavage, Granger Sutton, Owen White)

Postdoctoral fellows will participate in identification and analysis of new gene families within TIGR's databases of over 200,000 ESTs, comparative analysis of small genomes and human genomic regions, prediction of protein function and structure, and integration of sequence data from public databases into new cDNA databases established and curated at TIGR.

TIGR offers a stimulating research environment, a competitive compensation and benefits package, and amenities of both metropolitan Washington DC and rural Maryland. The ideal candidate will be a highly motivated individual, with excellent communication skills and expertise in molecular biology and/or computational biology, who enjoys being part of an innovative scientific team. Starting salaries range from \$30,000 - \$37,500, depending on qualifications. Applicants who currently hold a PhD, MD, or DVM with 0-3 years previous post-doctoral experience are encouraged to send a cover letter, *curriculum vitae*, bibliography, statement of research interests, and the names of three references to: **Human Resources Department, The Institute for Genomic Research**, 932 Clopper Road, Gaithersburg, MD 20878. FAX: (301) 869-9423. e-mail: postdoc@tigr.org.



TIGR is an Equal Opportunity Employer and encourages qualified women and minority candidates to apply.

#### UNIVERSITY OF PITTSBURGH RESEARCH FELLOWSHIP IN MEDICAL ONCOLOGY

The Department of Medicine at the University of Pittsburgh Medical Center offers **FELLOWSHIPS** in Medical Oncology for M.D., M.D./Ph.D., and Ph.D. fellows. This fellowship program involves intensive training in laboratory investigations, and for M.D. and M.D./Ph.D. fellows, provides clinical experience required for board certification in Medical Oncology and/or Hematology. Interested candidates will have the opportunity to select from a large number of cancer research-oriented laboratories at the University. The faculty includes investigators with research interests in molecular oncology and hematology, immunology and immunotherapy, molecular genetics, signal transduction, apoptosis, molecular pharmacology and gene therapy. Interested individuals should submit their curriculum vitae, the names of three references, and a brief statement of research interests to: John M. Kirkwood, M.D., Professor and Chief, Division of Medical Oncology, Department of Medicine, University of Pittsburgh, PA 15213-2582. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer and specifically encourages applications from women and minoritie.

#### FELLOWSHIPS IN REPRODUCTIVE BIOLOGY NORTHWESTERN UNIVERSITY

Postdoctoral and predoctoral FELLOWSHIPS are available in reproductive biology for highly qualified applicants. A diverse but integrated program offers research training in molecular, biochemical, cellular, physiological and behavioral aspects of reproduction. Participating faculty include: James Bartles (Sperm surface polarity); Erwin Goldberg (Molecular biology of the testis); Mary Hunzicker-Dunn (Ovarian signal transduction); J. Larry Jameson (Hormonal regulation of gene expression); Jon Levine (Neuroendocrinology of peptidergic neurons); Daniel Linzer (Molecular endocrinology); Kelly Mayo (Gene regulation in reproductive systems); Neena Schwartz (Gonadal-pituitary endocrinology); and Fred Turek (Seasonal Cycles/Circadian Clocks). Send curriculum vitae and names of three references to: Dr. Jon E. Levine, Department of Neurobiology and Physiology, Northwestern University, 2153 North Campus Drive, Evanston, IL 60208-3520. Applicants must be eligible for NIH training support (U.S. citizen or permanent resident). An Equal Opportunity Employer.

**RESEARCH ASSISTANT** for university in central Ohio. Performs assays on mammalian cells grown in tissue culture and cells isolated from animal tissue; operates and maintains time resolved and steady-state fluorescence spectroscopic equipment; conducts binding studies by fluorescent anisotropy or fluorescent lifetime titration; purifies protein components of human blood, using knowledge of protein purification methodologies; supervises and instructs lab personnel (i.e., graduate students, research aide, etc.) in above techniques; works with animals and assists with pharmacokinetic studies; maintains laboratory records; monitors and orders lab supplies. B.S. in biology or chemistry required and one year of experience in above-described duties or with toxicology experiments in animals and with protein purification. 40 hours per week, 8 am–5 pm, Monday through Friday, \$18,888 per year. Must have proof of legal authority to work indefinitely in the United States. Send résumé in *duplicate* (no calls) to L. Eggleston, JOB No.00817, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE. Two positions are available to study: a) the molecular mechanisms and control of HIV-1 replication in T cells, particularly as regards to the role of the *vif* gene; b) the molecular basis for HIV-1 neurotropism and HIV-1 mediated encephalopathy in AIDS. Applicants should have a Ph.D. or equivalent and three to five years of experience in virology and molecular biology. Salary: \$25,000 to \$30,000. Direct inquiries, including curriculum vitae and names of three references to: Dr. David J. Volsky, Molecular Virology Laboratory, St. Luke's/ Roosevelt Hospital Center and College of Physicians and Surgeons, Columbia University, 432 West 58th Street, New York, NY 10019. Telephone: 212-582-4451; FAX: 212-582-5027. An Equal Opportunity/Affirmative Action Employer.

## **POSITIONS OPEN**

#### POSTDOCTORAL FELLOWSHIP POSITIONS IN MOLECULAR DEVELOPMENT OF THE CARDIOVASCULAR SYSTEM

Various strategies are being employed to clone genes which are likely to regulate early processes in development of the heart and the vascular system. These include novel cell surface molecules, and members of the helix-loophelix class of transcription factors (*PNAS*, **91**:7066). The genetic regulation and developmental role of such molecules is under study by classical gain and loss of function techniques as well as homologous recombination.

Applicants should have a strong background in developmental biology or molecular biology. Please submit curriculum vitae, and the names and addresses of three references to: Dr. Thomas Quertermous, Division of Cardiology, Vanderbilt University Medical School, CC2218 MCN, Nashville, TN 37232-2170. An Equal Opportunit/Affirmative Action Employer.

#### THE NEUROSCIENCES INSTITUTE LA JOLLA Molecular Neurobiology

Applicaions are invited for the postdoctoral position of **JUNIOR FELLOW** in Experimental Neurobiology to study biological mechanisms underlying formation, release, and disposition of anandamide, an endogenous arachidonic acid derivative that activates brain cannabinoid receptors. Applicants should have a background in protein purification and characterization together with a strong commitment to neuroscience. Fellows will receive stipends appropriate to their qualifications and experience. Submit a curriculum vitae, statement of research interests, and names of three references to: **Dr. Daniele Piomelli**, **The Neurosciences Institute**, 3377 North **Torrey Pines Court**, **La Jolla**, CA 92037. FAX: 619-554-9159.

### FELLOWSHIPS IN TROPICAL BIOLOGY

Predoctoral, postdoctoral, senior postdoctoral and 10week graduate student FELLOWSHIPS are available to conduct research at the Smithsonian Tropical Research Institute (STRI) in the Republic of Panama. With a multinational staff of 32 scientists, STRI is an international center for advanced study in tropical biology (ccology, paleoecology, evolution, behavioral ecology, plant physiology and molecular evolution) and archaeology. STRI provides facilities on Barro Colorado Island and at Gamboa (tropical moist forest); a research vessel and marine stations on the Atlantic and Pacific coasts; a research library and complex in Panama City. For applications write: Office of Fellowships and Grants, Smithsonian Institution, Drawer TB, L'Enfant Plaza, Suite 7300, Washington, DC 20560. Telephone: 202-287-3271. Deadline: 15 January annually. Awards are based on merit without regard to race, color, religion, sex, nationality, or condition of handicap.

#### POSTDOCTORAL FELLOWSHIP NEUROSCIENCE

The Neurosciences Program at the Loeb Research Institute, Ottawa Civic Hospital and University of Ottawa, has positions to study the electophysiology and pharmacology of synaptic transmission in CNS neurons regulating pituitary and autonomic function. Requires M.D. or Ph.D. degree, experience with *in vitro* preparations, current and patch clamp recording techniques. Program members have expertise in molecular and cellular neurobiology applied to exocytosis, membrane trafficking, signal transduction, ion channel function, post-ischemic neuronal function and survival. Salary range \$28,650-\$34,500 (Can). Send or FAX (613-761-5360) curriculum vitae, a short statement of interests and names of three references to: Dr Leo Renaud, Neurology/Neurosciences Program, Ottawa Civic Hospital, 1053 Carling Avenue, Ottawa, Ontario, K1Y 4E9 Canada.

**RESEARCH ASSOCIATE**: Ph.D. in Cell Biology, Biochemistry or related field for study of signal transduction in the thrombin-platelet interaction. Desire expertise in this area and/or study of protein structure-function relationships or enzymology. Send curriculum vitae and names of three references to: Dr. R. A. Henriksen, Department of Medicine, East Carolina University, Greenville, NC 27858-4354. East Carolina University is an Equilo Opportunity/Affirmative Action Employer. Federal law requires proper documentation of identity and employability at the time of employment.

## **POSITIONS OPEN**

**RESEARCH ASSOCIATE** in University Biological lab in Dayton, Ohio area.

Manage research project isolating, characterizing and purifying pharmacologically active compounds (metabolites) from cyanobacteria (blue green algae). Duties include analysis, extraction, purification, quality control, data logging, and organizing computer files and records. Takes and processes orders from chemical companies for compounds. Manages research in detecting bioactive liver toxins produced by blue green algae. Helps maintain analytical equipment and helps order and stock lab supplies. Supervises one co-researcher. Requirements: B.S. in Biology or Biochemistry plus

Requirements: B.S. in Biology or Biochemistry plus three years of experience as a Biochemist, Biochemistry Technologist, Biochemistry Research Assistant, or in the job offered. An M.S. in Biology or Biochemistry may be substituted for the required experience. Special requirements, which may have been gained concurrently with either the education or experience required are:

One year of experience using liquid chromatography techniques, particularly High Performance Liquid Chromatography (HPLC) involving Ultraviolet, Fluorescent, photodiode array and Amino Acid Analysis techniques;

One year of experience developing immunoassay techniques, particularly Enzyme Linked Immunosorbent Assay (ELISA); and

One year of experience isolating and characterizing natural product toxins.

40 hours per week, 8:30 am-4:30 pm Monday through Friday, \$21,964 per year. Must have proof of legal authority to work indefinitely

Must have proof of legal authority to work indefinitely in the United States. Send résumé *in duplicate* (no calls) to: J. Davies, JOB No.00699, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

HUMAN GENOME POSTDOCTORAL FEL-LOWSHIPS available to conduct research related to the U.S. Department of Energy's Human Genome Program. Research areas include biology, chemistry, physics, mathematics, engineering, and computer and information science. Stipend is \$37,500. A doctoral degree received after April 30, 1992, is required as is U.S. citizenship or PRA status. Deadline is February 1, 1995. Contact: Human Genome Postdoctoral Fellowships, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-9975.

**RESEARCH ASSOCIATE POSITION** available immediately to join group testing novel therapeutic agents to inhibit replication of hepatitis B viruses. Ph.D., and experience with molecular cloning, gene expression, and transfection of DNA into eukaryotic cells is required, as well as ability to work independently. Send curriculum vitae and three references to: Dr. Patricia Marion, Stanford University Medical Center, Division of Infectious Diseases, Stanford, CA 94305. Or Email to hf.mel@forsythe.stanford.edu.

**BIOCHEMISTRY-NMR**—A faculty position is available for a **SCIENTIST** who can establish a vigorous and novel research program which uses NMR technology to solve important structural or biological problems. Resources are available to upgrade existing NMR facilities. The successful candidate will be expected to assist in the shared use of the NMR facility with the aid of a research associate. Collaborative arrangements with other faculty in areas of NMR structural analysis are anticipated. Send curriculum vitae and the names of three or more references to: Ms. Joan Savastano, Administrator, Department of Biochemistry, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Review of applications will begin on December 1, 1994. The Albert Einstein College of Medicine of Yeshiva University is an Equal Opportunity Employer.

**RESEARCH NEWS WRITER**—full-time. The Journal of NIH Research has a challenging opportunity for a dynamic biomedical science writer to join its respected staff in Washington, D.C. Candidate must have a graduate degree in biological science, Ph.D. preferred, and some writing experience. Lively writing style and a sense for news is essential. Send résumé, three writing samples that illustrate versatility of style, five to ten ideas for news stories, and names of three references to: The Managing Editor, The Journal of NIH Research, 1444 I Street N.W., Suite 1000, Washington, D.C. 20005. An Equal Opportunity Employer. Minorities/Female/Disabled/Veterans.



## THE CLEVELAND CLINIC FOUNDATION NEUROPATHOLOGIST

The Cleveland Clinic Foundation is seeking a Board-certified Neuropathologist to fill a position at the Assistant to Full Staff level, with joint appointments in the Departments of Pathology and Neurosciences. Applicant must have an independent research program, and will be expected to devote 20% effort to diagnostic neuropathology. Competitive salary, generous start-up funds, and excellent opportunities for interactions with programs in the Departments of Neurology, Neurosurgery, and Neurosciences are available. Neuroscience programs at The Cleveland Clinic Foundation are undergoing a rapid growth phase, with several new Staff appointments planned in the near future. Candidate should send CV, name and fax number of three references, and brief statement of research interest to: Dr. Bruce D. Trapp, Chairman, Department of Neurosciences - NC/30, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44195. The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.

## THE CLEVELAND CLINIC FOUNDATION NEUROSCIENCES FACULTY

Department of Neurosciences, The Cleveland Clinic Foundation Research Institute, seeks an outstanding candidate to fill a Faculty Position at the Assistant to Full Staff level. Applicant must have a Ph.D. and/or M.D., an active independent research program and utilize stateof-the-art techniques to investigate neuronal function as it relates to the pathogenesis of epilepsy. Competitive salary and generous start-up funds are available. Epilepsy programs in the Departments of Neurology and Neurosurgery are very active and provide an excellent opportunity for collaborative studies. The Department of Neurosciences is undergoing a rapid growth phase with several new Staff appointments planned in the near future. Candidates should send CV, name and fax number of 3 references, and brief statement of research interests to: Dr. Bruce D. Trapp, Chairman, Department of Neurosciences - NC/30, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44195. The Cleveland Clinic Foundation is an Equal Opportunity/ Affirmative Action Employer.



*SIBIA* is expanding its interdisciplinary research and development on therapeutics for diseases of the central nervous system. We have established an impressive record in the development of innovative technologies integral to the field of neuroscience and the biopharmaceutical industry. We are now seeking an experienced Scientist for a critical role in drug discovery for the neuropharmaceuticals of the future!

## DRUG SCREENING

You will focus on the identification of novel lead molecules based on high-throughput functional screening of compounds against recombinant brain receptors and/or ion channels. You will interact with members of our Chemistry, Neuropharmacology, Psychopharmacology and Molecular/Cell Biology Laboratories to develop new assays and pursue leads identified in the screening program. You will be responsible for management of the drug screening laboratory, strategic direction, and data analysis. A Ph.D. in Pharmacology or Chemistry with at least five years of postdoctoral experience in drug screening in an industrial setting is preferred.

Located on San Diego's beautiful La Jolla coastline, SIBIA offers not only a challenging and aesthetic environment, but also a competitive salary and benefits package. Send your C.V. with names of three references to: Lynn Alba, SIBIA, 505 Coast Blvd., South, Suite 300, La Jolla, CA 92037. EOE.



National Institute of Environmental Health Sciences National Institutes of Health 

Public Health Service Department of Health and Human Services

## DIRECTOR DIVISION INTRAMURAL RESEARCH (DIR)

The National Institute of Environmental Health Sciences (NIEHS) invites nominations and applications for the position of Director, Division Intramural Research (DIR). The incumbent of this position will direct laboratory and clinical research through eighteen laboratories and branches with 500 employees and approximately 100 non-ceiling personnel, and an annual budget of approximately 100 million dollars. The Director, DIR, will serve as principal advisor to the Institute Director on scientific affairs involving all Institute direct research programs; develops and recommends policies for the execution of research programs; determines effectiveness of current programs and recommends; and develops new and revised programs to meet national environmental health needs.

This is a Civil Service position in the Senior Executive Service. The salary range is ES-1 to ES-5, currently \$95,771 to \$115,255 (includes a locality pay of 3.09%) per annum. The person selected may be eligible for Physician's Comparability pay up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-federal selectee for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one year probationary period.

Applicants must meet the minimum educational requirements (or possess equivalent combination of experience and training) for Medical Officer, GS-602; other biomedical sciences (GS-400 group, GS-1300 group), as defined by the U.S. Office of Personnel Management Handbook X-118, Qualification Standards for Positions Under the General Schedule, which is available in Federal Personnel Offices and Federal Job Information Centers. Further information about the position may be obtained by calling 919-541-3317. An Application for Federal Employment (SF-171), accompanied by a current curriculum vitae and bibliography and Executive Qualification narrative should be submitted to:

## Mr. Bruce Wiggins (HNV91) NIEHS Personnel Office P.O. Box 12233 Research Triangle Park, NC 27709

Application must be received by January 18, 1995.

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.

NIH is an Equal Opportunity Employer

## The Charles A. Dana Foundation salutes the 1994 winners of the Charles A. Dana Awards for Pioneering Achievements in Health

Philippe Ascher, Ph.D., John W. Olney, M.D., and Jeffrey C. Watkins, Ph.D.

for multidisciplinary research that has illuminated the crucial role in our brains of the neurotransmitter glutamate

Yves-Alain Barde, M.D., and Hans Thoenen, M.D. for research that unveiled the mysteries of the neurotrophic factors that control how our nerve cells grow, survive, and even regenerate

## Albert J. Hudspeth, M.D., Ph.D.

for masterful investigations of the mechanisms, physiology, and disorders of hearing, particularly the critical and intricate operation of hair cells in the inner ear The \$50,000 Award honors discoveries in neuroscience that will lead or have already led to significant advances in the diagnosis, prevention, or treatment of human health problems. By making these Awards, the Charles A. Dana Foundation wishes to highlight the significant impact that research in neuroscience can have on problems that cause incalculable human suffering, demonstrate the essential interrelationship between basic research and clinical progress, and set forth the urgency of further research.

Nominations for the 1995 Awards are now solicited from the neuroscience community; the deadline for submission of nominations is January 10, 1995. Information and application packets can be obtained from The Charles A. Dana Awards for Pioneering Achievements in Health, Nominating Committee—Box S, c/o Ann Blanchard, Volen National Center for Complex Systems, Brandeis Univer-

sity, Waltham, MA 02254; telephone (617) 736-3141, fax (617) 736-3142, email NN@ELIZA.CC.BRANDEIS.EDU.

The Charles A. Dana Foundation David Mahoney, Chairman

# THE NEUROSCIENCES INSTITUTE

THE NEUROSCIENCES INSTITUTE (NSI) IS AN INDEPENDENT, not-for-profit organization at the forefront of research on the brain. The NSI, located on the campus of The Scripps Research Institute in La Jolla, is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

## Junior Fellow in Experimental Neurobiology

A PPLICATIONS ARE INVITED FOR POSITIONS AS JUNIOR FELLOW IN Experimental Neurobiology. The NSI is beginning a research program in experimental neurobiology designed to increase understanding of brain process at several organizational levels from the molecular to the cognitive. Research will be established in the new NSI experimental facilities in areas such as developmental, molecular, and behavioral neurobiology, neuropharmacology, neurophysiology of motor and sensory systems, cellular neurophysiology, and the physiology of sleep. Junior Fellows in Experimental Neurobiology will be expected to collaborate with newly appointed Senior Fellows in Experimental Neurobiology and to take advantage of opportunities for scientific exchanges with NSI's Fellows in Theoretical Neurobiology.

Applicants should be at the postdoctoral level and should have backgrounds in experimental neurobiology or related areas. Positions are now available.

Fellows will receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: *Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, California 92037.* 

## NTA

## EXECUTIVE DIRECTOR

## **National Science Teachers Association**

The National Science Teachers Association (NSTA) is seeking a qualified individual to serve as chief executive officer. NSTA is a professional organization of 50,000 science educators served by a Headquarters staff of more than 100 in Arlington, Virginia. The Executive Director oversees an annual budget of approximately \$15 million that supports programs directed at stimulating, improving, and coordinating science teaching from preschool through college.

Qualifications: Strong background in science education, including teaching experience. Candidate must demonstrate solid skills in management, communication, and negotiation; financial planning experience; and sound leadership ability. Knowledge of and experience working with the Washington, D.C. network, including both government agencies and private organizations, are desirable.

Salary and Appointment Date: Negotiable (indicate requirements).

Application Deadline: February 1, 1995.

To request the Executive Director Application, write to

Executive Director Search National Science Teachers Association 1840 Wilson Blvd. Arlington, VA 22201-3000

NSTA is an Equal Opportunity Employer and does not discriminate on the basis of sex, race, national origin, age, disability, or religion.



## Ten New Lectureships



The School of Biological Sciences at the University of Manchester (Dean: Professor Mark Ferguson) is the single largest Biology Department in the United Kingdom and one of the most successful in research and teaching. Functionally administered as a Research & Graduate School (Director: Professor Keith Gull) and an Undergraduate School (Director : Professor Mike Grant), the School has excellent research programmes spanning all areas of contemporary Biology from Biomedicine to Environmental Biology. These programmes are supported by more than £35 million of external research income from all the major Research Councils, Charities and Industries. A well-developed Graduate programme spans all areas of the School and there are currently some 260 Ph.D. students together with 85 Taught MSc students. At the Undergraduate level we have a high quality annual intake of 300 students into a broad range of Biological Sciences Degree courses, in addition to Medical, Dental and Paramedical students. We have well equipped central facilities for modern Biological research including electron microscopy, biomolecular and gene sequencing and synthesis, transgenesis, NMR, etc.

As part of our continuing development the School now seeks to appoint outstanding individuals to a number of new Lectureship positions.

## LECTURESHIP IN CELL/DEVELOPMENTAL/ MOLECULAR BIOLOGY

Applicants will be working at the molecular level on a fundamental aspect of cell function or developmental biology. Potential for interaction exists with large groups in cell adhesion, wound healing, extracellular matrix, epithelial cell biology, cytoskeleton growth factors, gene regulation, molecular genetics and mammalian development. **Contact:** Professor D.R. Garrod **Tel:** 061 275 5243 **Fax:** 061 275 3915 **E-Mail:** David.Garrod@man.ac.uk

## LECTURESHIP IN PHYSIOLOGICAL PLANT ECOLOGY/PLANT CELL BIOLOGY

This post will bridge our existing strengths in plant ecology and plant biochemistry. We are seeking an innovative scientist interested in the interaction between plants and the environment at either the physiological or cellular level. Applications are encouraged from those working in the field of photosynthesis or signal transduction, but other areas will be given full consideration. **Contact:** Professor M.J. Emes **Tel:** 061 275 3899

Contact: Professor M.J. Emes Tel: 061 275 3899 Fax: 061 275 3954 E-Mail: MEmes@fs2.scg.man.ac.uk

## LECTURESHIP IN NEURODEGENERATION/ MOLECULAR PHARMACOLOGY

To build on our strengths in either molecular pharmacology or neurodegeneration, we are seeking to appoint a lecturer with an appropriate background and expertise in molecular approaches to pharmacology and/or neurodegeneration.

Contact: Professor J.A. Hickman Tel: 061 275 5617

Fax: 061 275 5600 E-Mail: J Hickman@man.ac.uk.

## LECTURESHIP IN BIOTECHNOLOGY

Applicants should have expertise in modern biochemical or molecular biological techniques and be using these to study fundamental biological processes with relevance to known or potential biotechnological processes. The successful applicant will develop a vigorous research programme that will complement and build on our existing strengths in animal cell and microbial biotechnology. **Contact:** Dr John Rosamond **Tel:** 061 275 5082 **E-Mail:** Rosamond@fs2.scg.man.ac.uk

## LECTURESHIP IN STRUCTURAL BIOLOGY

This post will strengthen existing high quality research in biochemistry, molecular biology and macromolecular structure. Applications are sought from scientists who are using approaches involving biophysical/molecular biological techniques to address the structure and function of macromolecules/macromolecular assemblies involved in fundamental biological processes. **Contact:** Professor M.E. Grant **Tel:** 061 275 5074 **Fax:** 061 275 5082 **E-Mail:** mgrant@fs2.scg.man.ac.uk

## LECTURESHIP IN ECOLOGY

To develop our current research interests in responses of terrestrial ecosystem function and structure to environmental factors. We seek applications from both animal and plant ecologists. We are particularly keen to develop new lines of research into the cycling of nutrients and carbon between plants and soil biota. Applicants should have experience of experimental work in natural ecosystems as well as in controlled environments. **Contact:** Professor T. Callaghan **Tel:** 061 275 3877 **Fax:** 061 275 3938 **E-Mail:** Arctic@man.ac.uk

## LECTURESHIP IN BIOINFORMATICS

To enhance existing resources in Bioinformatics and Computational Molecular Biology we seek to develop new lines of research within the broad areas of sequence and genome data analysis. **Contact:** Dr Andy Brass **Tel:** 061 275 5096 **Fax:** 061 275 5082 **E-Mail:** ABrass@man.ac.uk

## LECTURESHIP IN MOLECULAR GERONTOLOGY

This post will build on our existing strengths in biological ageing research and develop new lines of investigation into the molecular mechanisms influencing lifespan and/or age-related disease. Age research is a major theme in the University and applications from individuals with a strong record in any relevant area are invited. **Contact:** Professor Tom Kirkwood **Tel:** 061 275 6851 **Fax:** 061 275 5654 **E-Mail:** Tom.Kirkwood@man.ac.uk

## LECTURESHIP IN INTEGRATIVE BIOLOGY

The purpose of this post is to investigate how genes, proteins, carbohydrates etc. interact to produce function at the tissue or whole animal level. We therefore seek applications from any biological discipline (physiology, pharmacology, anatomy, zoology, etc.) providing that the individual will investigate tissue, systems or whole animal biology using relevant genetic, molecular or cellular approaches. **Contact:** Professor Maynard Case

Tel: 061 275 5406 Fax: 061 275 5606 E-Mail: rmcase@man.ac.uk

## LECTURESHIP IN MOLECULAR CELL PHYSIOLOGY

Applicants will be expected to develop a research programme which combines patch-clamp and molecular techniques to investigate aspects of membrane transport. **Contact:** Professor Maynard Case **Tel:** 061 275 5406 **Fax:** 061 275 5606 **E-Mail:** rmcase@man.ac.uk.

For application forms, further particulars and an information pack covering all of the posts in this major new development, prospective applicants should contact: The Director of Personnel, Academic Staffing Office, The University of Manchester, M13 9PL (tel. 061 275 2028 fax. 061 273 5306). Quote reference 376/94. (Enquiries by e-mail to The Dean's Secretary: Sheila.Long@man.ac.uk). Informal enquiries concerning individual posts may be made to the contact persons listed who will be happy to discuss the opportunities in more detail and to arrange for informal visits., etc.

The full range of the lecturer salary scale is  $\pounds 14,756 - \pounds 25,735$  p.a. The starting salary in each case will take account of qualifications and experience.

Closing date for receipt of applications for any of these posts is Friday, 2nd December 1994.

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

## **PURCHASE COLLEGE - STATE UNIVERSITY OF NEW YORK** ICE PRESID **R ACADEMIC AFFA**

Purchase College, incorporating a School of the Arts and a College of Letters & Sciences, offers conservato-ry training in dance, music, theatre arts and film, and the visual arts, and distinguished liberal arts programs in the humanities, natural, and social sciences. Its prestigious faculty is composed of scholars and artists. The College maintains a major commitment to the community through its Division of Continuing Education.

Purchase is also a major cultural center with a celebrated architectural design. Its extraordinary Performing Arts Center and its renowned Neuberger Museum of Art are among the finest in the nation. The College enrolls approximately 4,000 students, with 1,700 in residence, and is located on 500 acres in Westchester County, 30 miles north of New York City.

The Vice President for Academic Affairs is the College's chief academic officer, reporting directly to the President. The Vice President's responsibilities include facilitating the development and implementation of academic policies and programs, oversight of the faculty evaluation and promotion process, budget formu-lation and supervision of student and instructional support services. The following officers report to the Vice President: the Deans of all Divisions; the Director of the Library, the Museum and the Performing Arts Center; as well as the Directors of Admissions, the Educational Opportunity Program, Institutional Research and the Registrar.

Candidates must have an earned doctorate or equivalent and successful administrative experience in an academic setting, demonstrating the knowledge, skills, and leadership ability to meet the responsibilities of the position. They must also have a record of scholarly and professional accomplishment, a strong com-mitment to diversity in all aspects of college life, and a demonstrated capacity to be an effective spokesperson for an academic community.

The salary is competitive. Women and minorities are strongly encouraged to apply. The starting date is July 1, 1995. We strongly urge interested parties to respond by December 2, 1994. Review of applications and nominations begins immediately. Candidates should send a vita, a letter of interest, supporting material as appropriate, and the names and addresses of five references. Nominations should include the addresses and telephone numbers of nominees. Applications and nominations should be sent to:

Dr. John R. Howard, Chair Search Committee, Vice President for Academic Affairs Purchase College, State University of New York Purchase, NY 10577



PURCHASE COLLEGE State University of New York An Affirmative Action/Equal Opportunity Employer



# O L B Y

## **Plant Ecologist**

Colby College is seeking a Plant Ecologist to fill a temporary, one-year position as Assistant Professor of Biology to begin September, 1995. Candidates should have a Ph.D. and a strong commitment to undergraduate education. Applicants should have a firld, raining in ecology and botany. Teaching assignments will include the plant science com-ponent of introductory biology, an additional course in plant biology, and team-teaching courses in introductory and advanced ecology. Familiarity with liberal arts colleges, teach-ing experience, and/or post-doctoral training are desirable.

## **Organismal Biologist**

Colby College is seeking an Organismal Biologist to fill a temporary, one-year position as Assistant Professor of Biology to begin September, 1995. Candidates should have a Ph.D. and a strong commitment to undergraduate education. Applicants should have broad training in animal biology with an emphasis in marine environments. Teaching assignments will include three courses in the candidate's discipline (e.g., invertebrate or vertebrate biology, introduction to marine biology) and team-teaching a senior project course. Familiarity with liberal arts colleges, teaching experience, and/or post-doctoral training are desirable

Please submit a letter of application, statement of teaching and research interests (including courses you would like to teach at Colby), curriculum vitae, reprints of publications, and three letters of recommendation to: Plant Ecologist Search or Organismal Biologist Search, Department of Biology, Colby College, Waterville, Maine, 04901. Application review will begin after December 15, 1994, and continue until the position is filled. Colby College is an Affirmative Action/Equal Opportunity Employer, and encourages applications from minorities and women.

# Cognitive Neuroscience

## McDonnell-Pew Investigator-Initiated Grants

McDonnell-Pew Program in Cognitive Neuroscience is accepting proposals from individuals pursuing innovative, multi-disciplinary research investiaating the relationship between human cognitive function and the underlying brain mechanisms.

Individuals currently receiving support from McDonnell-Pew Centers are not eligible to apply for Investigator-Initiated Grants. Individ-uals at Institutions with McDonnell-Pew Centers but who do not receive any support from the Center are eligible to submit proposals.

Preference will be given to projects that include input from two or more of the disciplines contributing to cognitive neuroscience: clinical and basic neuroscience, psychology, computer science, linguistics and philosophy.

The grants provide a maximum of \$35,000/ year for up to 3 years. An institutional overhead of 10% total salary and fringe benefits may be requested but must be included in the \$35,000/year maximum. The funds may be used to support research, postdoctoral train-ing or to provide seed money for senior investigators exploring new research directions. Proposals establishing interdisciplinary and/or inter-institutional collaborations are encouraged. Requests for funds to support graduate student thesis research will not be accepted.

## Deadline for receipt of proposals: February 20, 1995.

To request further information and application auideilnes contact: Susan M. Fitzpatrick, Ph.D., Program Officer, McDonnell-Pew Program in Cognitive Neuroscience, James S. McDonnell Foundation, 1034 South Brentwood Boulevard, Suite 1610, St. Louis, Missouri 63117, Phone: 314-721-1532, Fax: 314-721-7421, e-mail: CØ6819CN@WUVMD.WUSTL.edu

## THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF PHYSICS Engineer

(Technical Director of Laboratories)

The current academic interests of the Department of Physics of the Hong Kong University of Science and Technology mainly focus on optical and condensed matters, and materials physics. The Engineer (Technical Director of Laboratories) is a senior post in the Depart-ment. He/She will be responsible for the supervision of departmental technical staff, co-ordination of repair, maintenance, procurement of teaching and research instruments, management of laboratory facilities, and monitoring of fire and safety issues in the department.

Applicants should have a relevant degree and at least 6 years' post-qualification experience in an academic, industrial or a national research lab-oratory. Knowledge of cryogenics is desirable.

competitive annual salary of approximately US\$52,900 to \$88,400 (HK\$7.8 = US\$1) will be offered to the suitable appointee depending on qualifications and experience. Generous fringe benefits including medical and dental benefits, annual leave, and children's education allow-ance are provided; housing benefit and air passages are also provided where applicable. Initial appointment will be on a 3-year contract; a gratuity of 25% of the total basic salary drawn will be payable upon successful completion of contract. Re-appointment after the initial contact will be subject to mutual agreement.

Applications together with a curriculum vitae and the names and addresses of three referees should be sent to the Personnel Office, The Hong Kong University of Science and Tech-nology, Clear Water Bay, Kowloon, Hong Kong (Fax: (852) 358 0700) in duplicate before 31 December 1994.

## For Over A Century, We've Created The Future In Pharmaceuticals.

Since 1888, Abbott Laboratories has been at the forefront of drug discovery. Our breakthrough products have changed the face of modern health care—and made us a globally recognized leader in pharmaceuticals. Now, you could be part of the future success of our Pharmaceutical Products Division.

## BIOCHEMIST/ CELLULAR BIOLOGIST

Working with a team of chemists and biologists, you will be involved in the area of cytokine biology related to inflammation. We require a PhD and 2+ years pharmaceutical industry experience with an interest in drug discovery. Experience with protein purification, cell culture, enzymology, assay development, data handling, and molecular biology techniques is desired. **Reply to Alison Burke, Job# DM74086.** 

## MANAGER-CHEMICAL INFORMATION SCIENCE

You will direct the development of chemical information systems for application in our Pharmaceutical Products Division Research and Development. These systems are used in R&D programs involving chemical diversity, new lead discovery, chemical modeling, laboratory information, inventory, and expert classification. You will supervise the efforts of 5 professional staff (some at the PhD level) devoted to chemical information systems development, administration and support.

This position requires a PhD in Chemistry along with 2+ years of project leadership experience. In addition, we require 4 years of scientific software development experience in chemical modeling, chemical information systems, or a related field. **Reply to Linda DeLavallade, Job# 69074.** 

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area, approximately 30 miles north of Chicago. For confidential consideration, please send a resume and salary history (indicating appropriate response name and job #) to: D-583, AP6B, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.



Experience The Abbott Edge.

VACANCY ANNOUNCEMENT

## NATIONAL CENTER FOR RESEARCH RESOURCES

## NATIONAL INSTITUTES OF HEALTH

## **POSITION AVAILABLE**

The Comparative Medicine Program (CMP) of the National Center for Research Resources (NCRR), National Institutes of Health (NIH) is currently inviting applications for the position of Health Science Administrator/Veterinary Medical Officer. The position is located in the Comparative Medicine Program which administers three extramural research resources programs; the Regional Primate Research Centers Program, the Laboratory Animal Sciences Program, and the AIDS Animal Models Program. The CMP is responsible for the overall planning, coordination and implementation of policies and procedures for laboratory animal resources and animal model programs which support vital resources and facilities for the research programs of medical and health-related institutions. These programs involve a great variety of health research and scientific disciplines at universities; hospitals; medical; veterinary; dental schools; and clinical and non-profit research institutions. Incumbent provides technical leadership and scientific guidance in the planning, development, evaluation, and administration of resource grants and contracts for the Laboratory Animal Sciences Program, CMP. Performs major professional functions, including (1) negotiates with officials of the nation's universities and research institutions (30%); (2) interprets policies and procedures (30%); (3) identifies research animal resource needs (10%); (4) advises grant officials concerning the development of plans for research animal resources (10%); and (5) performs various other related scientific and administrative functions described below, including participation with senior scientists, department officials, and academic deans in the development research resource programs involving inter-university and institutional programs (20%). Incumbent is required to have knowledge of laboratory animals and comparative pathology. The incumbent cooperates with grantee officials and/or other NIH institutes, centers, and divisions in the review processes and negotiations of laboratory animal research resource grants. The salary range for a GS-13 is \$49,947 to \$64,928 per year and for the GS-14 is \$59,022 to \$76,733 (includes 4.23% locality pay).

APPLICATION FOR FEDERAL EMPLOYMENT (SF-171) and response to the Knowledges, Skills and Abilities (KSA'S) must be submitted to apply for this position by close of business 12-5-94. This position is included in the Federal Equal Opportunity Recruitment Program (FEORP) and is therefore targeted for EEO recruitment efforts.

Further information and qualification requirements can be obtained by contacting:

Mr. Sean L. Stroud NCRR/Personnel Office Building 31, Room 3B38 31 CENTER DR MSC 2130 BETHESDA, MD 20892-2130 Telephone: (301) 496-1524 Fax: (301) 402-2110

NIH is an Equal Opportunity Employer

## THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

## **Department of Biochemistry**

## FACULTY POSITIONS

The Hong Kong University of Science and Technology, established in April 1988, is a publicly-funded research university with a mandate to teach, to do research, to nurture talents and to facilitate technological development in Hong Kong. The medium of instruction is English. The Department of Biochemistry invites applications for **Associate Professor/Senior Lecturer** and **Assistant Professor/Lecturer** positions in area of signal transduction and immunology. Outstanding candidates in other areas of biochemical research are also welcome to apply. Generous fringe benefits include medical and dental benefits, annual leave, and children's education allowances. Air passages and housing are also provided where applicable. Salary will be in the range of US\$52,900 to US\$110,500 (exchange rate: US\$1= HK\$7.8) per annum depending on qualification. Initial appointments will normally be on a three-year contract which is renewable subject to mutual agreement. A gratuity of an amount equal to 25% of the total basic salary drawn will be payable upon successful completion of contract. Approved sabbatical leave will be at full salary.

Applications/nominations should be sent with a C.V., together with the names and addresses of three referees, to **Professor Jerry H.C. WANG**, **Chairman of Search Committee**, **Department of Biochemistry**, **HKUST**, **Clear Water Bay**, **Kowloon**, **Hong Kong (Fax: 8523583978)** by 31 January 1995, but the search will continue until suitable appointments have been made.

#### Northwestern University Department of Neurobiology and Physiology and

## Institute for Neuroscience

Three tenure-track faculty positions for outstand-ing neuroscientists in the areas of *Molecular Biology, Genetics, Cellular and/or Systems Neu*robiology are now open in the Department of Neurobiology and Physiology (NBP), with joint appointments in the intercampus Northwestern University Institute for Neuroscience (NUIN). University Institute for Neuroscience (NUIN). These new positions represent an increased commitment by the University to the neuro-sciences within both the NBP Department and NUIN. We are particularly interested in hiring young neuroscientists at the Assistant Professor level who have had postdoctoral experience, although senior candidates will also be consid-ered. The salary level is open. New faculty are expected to complement the strengths of the expected to complement the strengths of the Department in the areas of circadian biology, endocrinology, molecular and cell biology, neu-rogenetics, and sensory neurobiology. In addition to maintaining a strong independent re-search program, faculty are expected to participate in the teaching of undergraduate and graduate students. The Department is located in an attractive setting on the main campus along the shore of Lake Michigan. Applicants should send a curriculum vitae, a statement of research interests, and have at least three letters of reference sent to the address below. Applica-tions should be received by December 1, 1994, to receive full consideration, although the searches will proceed until the positions are filled. Evaluation will begin immediately and hir-ing may start as soon as spring 1995. Women and members of minority groups are especially encouraged to apply. Northwestern University is an AA/EOE Employer. Please address the ap-plications to Chair, Neurobiology and Physiology Search Committee, Northwestern Universi 2153 N. Campus Drive, Evanston, IL 60208-3520.

## SCIENTISTS

Darwin Molecular Corporation, a growing, information intensive biotechnology company is seeking outstanding Scientists experienced in applying organic chemistry to research projects addressing important biological problems. The company's technical focus is on the aquisition and use of DNA sequence information to identify and select targets for drug discovery via molecular evolution. Darwin's initial therapeutic focus is on autoimmune disease, AIDS, and cancer.

We are seeking Scientists with solid backgrounds in synthetic organic chemistry interested in using their talents as a member of an interdisciplinary team. The individuals will play a key role in discovering lead compounds in a variety of therapeutic areas. Experience in enzymology or protein structure/function a plus. A personal commitment to high quality drug discovery and strong interpersonal skills are necessary to function as part of a highly interactive team. Ph.D. and preferably 2 years of postdoctoral experience are required.

Darwin Molecular Corporation offers competitive salaries, benefits and an equity participation program. Our company's start-up environment is ideal for self-motivated, innovative employees who are eager to grow with us. Our scenic location just north of Seattle is ideal for those who enjoy a relaxed environment just minutes from the city.

To apply, please send curriculum vitae to: Human Resources SCI111194CH, Darwin Molecular Corporation, 1631 220th Ave. S.E., Bothell, WA 98021.



Darwin Molecular is an Equal Opportunity Employer.



## UNIVERSITY OF BERNE Professor for Geobotany

beginning April 1, 1996

The University of Berne seeks applications from leaders in the field of Geobotany. Responsibilities are:

- Research in Vegetation, Ecology, Community Ecology or Conservation Biology
- Design and supervision of projects of graduate students
- Teaching in basic and advanced courses in the above mentioned fields, including quantitative methods in vegetation ecology
- Cooperation with the existing group in Paleoecology and neighboring institutes for Plant Physiology, Ecology and Geosciences in order to develop landscape ecology.

Requirements are a PhD and teaching experience. Applicants should send a curriculum vitae, a list of publications, copies of the five most important papers, a statement of teaching experience and a short description of research plans by **January 31**, **1995** to the Department of Education of the Kanton Bern, Sulgeneckstrasse 70 (1600.22/94), CH-3005 Berne. Further details may be obtained from Prof. B. Ammann, Botanical Institutes, Altenbergrain 21, CH- 3013 Berne, Switzerland.

## EXECUTIVE DIRECTOR Scientific & Engineering Personnel

The National Research Council (NRC), the principle operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government organization located in Washington, D.C., invites applicants for the position of Executive Director for its Office of Scientific and Engineering Personnel (OSEP). The incumbent plans and oversees a broad range of programs concerned with the effective development and utilization of scientific and engineering personnel and with methodologies for assessing current and projected employment demand and personnel supply of scientific and engineering talent. The analytic programs have grown in relative importance and the incumbent is expected to oversee continued expansion as policy makers confront important human resource issues, including planning and development of new study activities concerned with graduate education, postdoctoral training, and utilization of scientific and engineering personnel. Given the cross-cutting nature of the program, the incumbent is also expected to coordinate and work closely with the other major units of the NRC and with related programs in other organizations.

The Executive Director in cooperation with the OSEP Chairman and Executive Board, manages OSEP as one of nine major program units of the NRC, including all scientific, financial, and administrative operations of the unit. The incumbent directs, administers, and reviews operational and analytic programs; oversees the development of funding and budgets; oversees national and international fellowship and associateship programs; and supervises approximately 40 professionals and 45 support staff.



of higher education is essential.

Please send resume in confidence to: National Research Council Human Resources, GR 146 (OSEP/ED-SC) 2101 Constitution Avenue, NW Washington, DC 20418

An Equal Opportunity Employer

Applicants should have the following gualifications: Ph.D. or

equivalent, preferably with a broad policy-analytic background and demonstrated achievement in areas related to graduate education and/or human resource policy with respect to scientific and engineering personnel, including issues involving education/training, utilization, and labor market conditions. Familiarity with science policy issues, statistical methodology and data bases that provide information about human resource,

and graduate education issues is also desirable. At least ten years of experience related to (1) national resources of

scientific and engineering personnel with advanced degrees; and (2) management of larger peer reviewed programs such as postdoctoral fellowship and associateship programs required.

Substantial leadership experience in related positions with responsibility for program development, policy analysis, and policy information is required. Familiarity with government agencies, including contract/grant procedures, and institutions

## THE UNIVERSITY OF THE WEST INDIES

St. Augustine, Trinidad

Applications are invited for the following vacancy in the Faculty of Medical Sciences:

## PROFESSOR OF ANATOMY

## **School of Medicine**

Applicants should have a PhD in Anatomy, a good research record and substantial experience in teaching two or more Anatomical disciplines.

ANNUAL SALARY RANGE Medical: Professor TT\$134,592 -TT\$151,968. An Institutional Allowance ranging from 10% to 30% of basic salary depending on post also payable. Special Allowance Per Annum: Professor TT\$7,800.

Passages, Pension, Housing Allowance, Study and Travel and Book Grants. Applications naming three referees and detailing qualifications and experience should be sent to the Registrar, University of the West Indies, St Augustine, Trinidad, as soon as possible. Further particulars sent to all applicants; these are also available from Appointments (43370), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK (tel. 071 387 8572 ext. 206; fax 071 383 0368).



Graduate Research Fellowships in Molecular Life Sciences at The Ohio State University

Distinguished

The Ohio State University is undertaking a major initiative in Molecular Life Sciences Research that will include at least thirty new faculty hires in the next six years. As part of this initiative, the University is supplementing its present graduate programs with a Distinguished Fellowship Program in Molecular Life Sciences. These competitive Fellowships will carry a stipend of \$16,000 per year plus full tuition authori-zation. The Molecular Life Sciences Predoctoral Fellows will enroll in one of the Departmental or Interdepartmental Graduate Programs in the Colleges of Medicine, Biological Sciences, Pharmacy, Veterinary Medicine, Mathematical and Physical Sci ences, or Food, Agricultural and Environmental Sciences. The graduate programs encompass the full range of basic and applied Molecular Life Sciences Research. Research facilities on campus are excellent and include the Comprehensive Cancer Center, Biotechnology Center, and Retrovirology Center. Present faculty number more than 150 molecular life scientists performing state-of-the-art research in biochemistry, immunology, microbiology, molecular genetics, molecular medicine, neurobiology, pharma-cology, plant molecular biology and virology. Columbus was recently named by Newsweek mag-azine as one of America's top cities and the quality of life on campus and in the city is excellent. Consid-eration of fellowship applications will begin on February 1, 1995. Inquiries and applications for graduate research fellowships should be directed to Dr. Anthony Young, Neurobiotechnology Center, The Ohio State University, 182 Rightmire Hall, 1060 Carmack Rd. Columbus, OH 43210 Inquiries about faculty positions should be directed to Dr. Alan Lambowitz, Department of Molecular Genetics, The Ohio State University, 876 Bioscience, 484 W. 12th Ave., Columbus, OH 43210. The Ohio State University is an Opportunity/Affirmative Action Employer. Women, minorities, Vietnam era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

## MOLECULAR ANIMAL PHYSIOLOGY UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan invites applications for a tenure-track position in the field of Molecular Animal Physiology. We anticipate hiring at the ASSISTANT PRO-FESSOR level, but outstanding candidates at higher levels may be considered. Candidates must have a Ph.D. in biology, zoology or physiology and postdoctoral experience. The successful candidate will join a large, diverse department with strength in both organismal and molecular biology. Among the areas of particular interest to the Department are secretion, membrane transport, and cell signaling, but the specific subfield of physiology is of less concern than is a record of excellence in research and a commitment to undergraduate and graduate teaching. In addition to establishing a successful research program, the candidate will be expected to participate in undergraduate and graduate teaching of the department. To apply, send a C.V., copies of reprints and brief summaries of present research and future research plans and have three letters of reference sent directly by January 6, 1995.

Chair, Molecular Physiology Search Committee Department of Biology University of Michigan Ann Arbor, MI 48109-1048

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



Bethesda, MD

The National Research Council (NRC) is accepting applications for three award competitions in 1995 for Postdoctoral and Senior Research Associateships at the Naval Medical Research Institute, Bethesda, Maryland. Research opportunities include.

**NEUROSCIENTIST:** Opportunity to study basic mechanisms of seizures induced by exposure to hyperbaric oxygen Contact: Andrea Harabin. Ph.D.

**BIOCHEMIST/ENZYMOLOGIST:** Opportunity for a protein chemist to purify, assay, and characterize enzymes involved in brain neurotransmitter metabolism. Contact: Milton Axley, Ph.D.

Each NRC awardee will work in one of the above project areas as a guest investigator at the Naval Medical Research Institute. Annual stipend for recent Ph.D. recipi-ents is \$32,000 and is appropriately higher for senior researchers. Each award is for one year renewable to a maximum of three. Support is provided for relocation and limited professional travel, and a health insurance program is offered. For further information on research opportunities, contact

directly, by mail or fax, one of the individuals listed above at:

National Naval Medical Center NAVAL MEDICAL RESEARCH INSTITUTE, Code 51 Bethesda, Maryland 20889-5607 FAX: 301/295-0782

Applications, submitted directly to the NRC, are accepted on a continuous basis throughout the year. Those postmarked by: January 15, will be reviewed in February; by April 15, in June; and by August 15, in October.

JAE ЮM

FOR APPLICATION MATERIALS CONTACT: The National Research Council The Associateship Programs (TJ-2094/NN) 2101 Constitution Avenue, NW Washington, DC 20418 FAX: (202) 334-2759

## MOLECULAR PLANT SYSTEMATICS University of Michigan

The University Herbarium and the Department of Biology seek to fill a joint tenure-track position in molecular plant systematics at the level of Assistant Curator/Assistant Professor, although applications from candidates at all ranks will be considered. We especially seek applicants with broad training in plant systematics and expertise in molecular and other modern methods for investigating the phylogenetic systematics of vascular plants. The successful candidate also must be qualified to teach undergraduate and graduate courses in biology and plant evolution and systematics, as well as curate in the Herbarium. Candidates must have a Ph.D. in Biology, Botany or Plant Sciences, and postdoctoral or comparable experience. Applications should include a curriculum vitae, a statement of teaching and research interests, and reprints of significant publications. Send these materials and arrange to have three letters of recommendation sent directly to:

## Search Committee Chair University of Michigan Herbarium North University Building Ann Arbor, MI 48109-1057

Deadline for receipt of application materials is January 6, 1995.

> The starting date for the position is September 1, 1995.

The University of Michigan is an Affirmative Action, Equal Opportunity Employer.

## Faculty Positions in Neurobiology University of Maryland School of Medicine Department of Anatomy

The Department of Anatomy has new leadership; significant growth is underway in the area of neurobiology. Our focus is on the development, or ganiza-tion and function of neural networks. New full-time tenure-track faculty will be recruited in these areas. Positions are primarily at the Assistant Professor level, but exceptional candidates at any level will be considered. Salary is dependent upon qualifications and experience.

The Department will move into new laboratories in the summer of 1995. There will be a significant increase in research resources, including core laboratories in neurohistology, molecular biology, tissue culture, imaging, and neurophysiology.

Successful candidates will have a Ph.D. or equivalent, Successful candidates will have a Ph.D. or equivalent, outstanding ability in teaching, and exceptional achievement in their field of research, including the potential to attract external funding. They will be expected to develop independent research programs and to participate in graduate and medical school teaching. We are particularly interested in candidates whose research interests supplement our existing strengths and who can establish collaborative research programs research programs.

For best consideration, applications should be received before Dec. 1, 1994. Applicants should send a C.V., a summary of research accomplishments, a description of future plans, and the names of 3 - 5description of future plans, and the names of 3 - 5 individuals from whom recommendations may be obtained to:

Dr. David V. Smith Chair, Faculty Search Committee Department of Anatomy University of Maryland School of Medicine 655 West Baltimore Street Baltimore, MD 21201-1559

Our Department is eager to diversify its faculty and we especially encourage women and minorities to apply. The University of Maryland is an AA/EEO/ ADÁ employer.

## Laboratory Director

A position is open for a Director of Parentage Testing. This highly visible position entails scientific direction and management of a national testing laboratory and direction of related product development. An M.D. or Ph.D. with expertise in DNA-based testing is required. Experience in paternity testing, genetics, statistics, and laboratory management preferred. Excellent communication skills essential.

The Blood Center of Southeastern Wisconsin, Inc., is a nonprofit service organization which offers specialized laboratory services on a regional and national level and is recognized internationally as a leader in blood-related research. The Blood Center provides all of the blood and blood components used by patients in 29 southeastern Wisconsin hospitals.

The Blood Center of Southeastern Wisconsin offers an excellent wage and benefit package. Send curriculum vitae and names and addresses of three references to:



## The Blood Center

of Southeastern Wisconsin Attn: Debra Endean, Ph.D. 1701 W. Wisconsin Ave. Milwaukee, WI 53233 Equal Opportunity Employer Smoke-free Workplace M/F/H/V

## Director: Ames Laboratory

Iowa State University of Science and Technology (ISU) is seeking an outstanding individual with strong research and national laboratory manage-ment experience for the directorship of the Ames Laboratory. The laboratory was established in 1947 and is operated by ISU for the U.S. Depart-ment of Energy (DOE). Located on ISU campus, the laboratory is closely integrated with the re-search activities of many academic departments and maintains a strong tradition of excellence in fundamental materials sciences, chemistry, engi-neering, applied mathematics and related discineering, applied mathematics and related disci-plines. Laboratory programs focus on the science base for energy production and use, with strong efforts also in advanced computing and environ-mental management. The Director is ultimately responsible for the quality, development and lead-erspin of these programs in accordance with wolv. ership of these programs in accordance with evolv-ing DOE missions and budgets. Laboratory fund-ing is over \$35M in FY94, and staffing includes about 725 employees.

Candidates should have demonstrated significant personal accomplishment in research and have successful program development and management experience at a major research organization. Federal laboratory experience, particularly with DOE, is strongly preferred, Special emphasis will be placed on evidence of the ability to manage change and to focus or organism in response to the national research agenda and the evolving mis-sions of DOE, including initiatives contributing to economic development and environmental protection.

Applications should be sent to Dr. Robert Ander-son, Chair, Ames Laboratory Director Search Committee, c/o 127 Spedding Hall, Iowa State University, Ames, Iowa 50011. Review of nominations and applications will begin on January 15,1995. Iowa State University is an equal oppor-tunity/affirmative action employer. Minorities, women, and members of other protected classes are encouraged to apply

VYSIS, Inc. (formerly Imagenetics) is a growing business unit of Amoco Technology Company focusing on in-vitro medical diagnostics, specifically in the areas of genetic and cancer diagnostics. VYSIS is located in the Western Chicago suburbs. We have an immediate opening for:

## Molecular Biologist

Will work as a member of a team of scientists to develop DNA probe diagnostic products for cancer and other genetic diseases, Develop new DNA probe techniques. Help with the conversion of DNA (genes) into materials for the manufacture of diagnostic products. Present reports and establish relationships with outside scientists in academia and industry. Ph.D. or M.D. with 3-5 years' experience with human molecular biology techniques as applied to human DNA (cloning, PCR primer design, DNA sequencing, CHEF gels, Southerns, etc.). In situ hybridization and molecular oncology experience required. Industrial diagnostic experience preferred. Should have knowledge of genetic databases, i.e. GDB, GenBank, EMBL, CEPH.

VYSIS, Inc. offers access to the finest technological and scientific resources. We provide a premier compensation and benefits package. Please send your resume to: Robert E. Hale, Human Resources Associate, ATC Diagnostics, Inc., 31 New York Avenue, Framingham, MA 01701; fax (508) 879-6462; tel (508) 935-1265. We are an

equal opportunity employer committed to strength through workforce diversity.

## <u>Announcement</u>

FORMERLY IMAGENETICS

## **GRANT PROGRAM**

Molecular Devices Corporation offers a limited number of equipment grants to academic institutions performing basic research in mammalian cell biology. The purpose of this program is to offer research scientists the opportunity to make novel discoveries using a Cytosensor® Microphysiometer System, with the ultimate goal of publication.

Briefly, the Cytosensor System is the latest tool for studying the physiological consequences of receptor activation; it has been shown to be particularly useful for drug discovery and signal transduction research. The System can monitor receptormediated responses from living cells in minutes, providing functional dose responses in just a few hours. Receptor activation can be studied even without previous knowledge of the signal transduction pathway.

For a comprehensive information package including guidelines for grant submittal, scientific publications, Application Notes, Technical Bulletins and a Reference Guide please contact:



Molecular Devices Corp. 1311 Orleans Drive Sunnyvale, CA 94089 PH: (408) 747-1700 FX: (408) 747-3602

Deadline for Grant Submission is December 31, 1994



# MAKE THE MOST **IMPORTANT DISCOVERY**

Exploring and testing your analytical and intuitive abilities is what a scientific career is all about. And Burroughs Wellcome Co. can give you those opportunities. We are at the forefront of important new pharmaceutical developments, with a long record of successes. That means you can have the resources and support to do your best work, and make a meaningful difference. Discover your capabilities at Burroughs Wellcome Co.

## **Research Scientist III / Research Scientist IV**

The Research Scientist III will be involved in drug discovery at the molecular level. Will utilize expertise in the areas of chemistry, enzyme inhibitor kinetics, novel assay developqualified candidate must have a B.S. degree in Biochemistry/ Chemistry PLUS six years of related experience **OR** an M.S. degree in Biochemistry/Chemistry PLUS four years of related experience OR a Ph.D. in Biochemistry/Chemistry. Other factors to be considered include experience in enzyme kinetics, assay development and characterization of recombinant enzymes as well as a Ph.D. in Biochemistry/Chemistry. Scientific Writing Assessment will be required.

The Research Scientist IV will be involved in drug discovery at the molecular level. Will utilize expertise and experience in the application of this expertise in the areas of chemistry, enzyme inhibitor kinetics, novel assay development, and characterization of recombinant enzymes to lead discovery. The qualified candidate must have a B.S. degree in Biochemistry/ Chemistry PLUS seven years of related experience **OR** an M.S degree in Biochemistry/Chemistry PLUS five years of related experience OR a Ph.D. in Biochemistry/Chemistry PLUS one year of Post Doctoral experience or one year of related experience. Other factors to be considered include experience in enzyme kinetics, assay development and characterization of recombinant enzymes as well as a Ph.D. in Biochemistry/ Chemistry and related Post Doctoral experience. Scientific Writing Ássessment will be required.

We offer a competitive salary and comprehensive benefits. And our outstanding Research Triangle Park location is one of the most desirable areas of the country in which to work and live. To apply, please send your resume, indicating REQ #65907-29 in your cover letter, by Tuesday, November 29, 1994, to: Burroughs Wellcome Co., Human Resources Department, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 315-8347 in Research Triangle Park; or (919) 707-2997 in Greenville.



BURROUGHS WELLCOME CO.

#### Agricultural Research Service

## SOIL SCIENTIST (PHOSPHORUS)

The Agricultural Research Service, USDA, University Park, Pennsylvania, has an opening for a permanent full-time **SOIL SCIENTIST** to lead research to define and manage the critical factors controlling P losses from fields, landscapes, and watersheds, and to develop and conduct research on the chemical factors controlling these P losses. Demonstrated experience required in: 1) formally leading research projects; and 2) publication record, with emphasis on the chemical aspects of P cycling or controlling losses. Candidates must be U.S. citizen; have a degree in Soil Science or related discipline that included 30 semester hours in biological, physical or earth science and 15 semester hours in soil chemistry, soil physics, and soil fertility; have knowledge of the phosphorus-water-soil-sediment-plant system; and the ability to design, plan, and conduct research and publish results. Salary commensurate with experience (\$49,401 to \$68,667 per year). For copy of the possino description call **Teri Jordan at 814-863-0939 or FAX: 814-863-0935**. For application package call **Angela Canterini at 301-344-1920**. Incomplete applications will not be considered. Applications in response to this advertisement must be marked **5N005** and mailed by December 23, 1994.

USDA/ARS is an Equal Opportunity Employer.

USDA, Agricultural Research Service announces an Interdisciplinary: **SUPPORT SCIENTIST** position for a Geneticist, Horticulturist, or Plant Molecular Biologist. This is a term appointment not to exceed four years. The assigned duty station is Walt Disney World, EPCOT Center, Orlando, Florida. Research will focus on development of a system for transforming peach shoot meristems with modified fruit ripening genes as part of a team effort aimed at genetic improvement of peach. The incumbent will be required to present research results to both the scientific community and the public. The position requires knowledge of and skill in plant molecular biology and plant tissue culture techniques. Salary range: \$28,648 to \$34,662 commensurate with experience. For information on application procedures, contact Janie Carr, PD, at 301-344-4569. For project information contact Dr. Ralph Scorza, USDA, ARS, AFRS at 304-725-3451. Applications should be marked 5N003, and must be postmarked by November 30, 1994. Mailing Address: USDA, ARS, POB/NS, 6305 Ivy Lane, Room 328, Greenbelt, MD 20770-1435. An Equal Opportunity Employer.

#### APOPTOSIS RESEARCH

**RESEARCH ASSOCIATE POSITION** is available in the Molecular Urology Laboratory for studies of the genetic changes associated with human prostate cancer development and progression and for the formulation of genetic approaches to enhance apoptosis of prostate cancer cells.

Strict requirements include a graduate degree in the basic sciences and authoritative experience with recombinant DNA methods and nucleic acid analysis. Experience with other techniques such as immunocytochemistry, Western blot analysis, *in situ* hybridization and/or antisense oligonucleotide suppression of gene activity also preferred. Salary range commensurate with expertise.

Send curriculum vitae and names of references to: Dr Ralph Buttyan, Director, Molecular Urology, Columbia University College of Physicians and Surgeons, 630 W. 168th Street, New York, NY 10032.

Columbia University is an Equal Opportunity/Affirmative Action Employer.

ELECTROPHYSIOLOGIST: Position available for electrophysiologist (M.S. or Ph.D.) to join ongoing research program, focusing on calcium-mediated injury and neuroprotection in optic nerve. Experience with electrophysiology and computer data acquisition is essential. Excellent opportunity to work with multidisciplinary group. Send curriculum vitae, statement of interest and three letters of reference by December 31, 1994, to: Stephen G. Waxman, M.D., Ph.D., or Bruce Ransom, M.D., Ph.D., Department of Neurology, Yale School of Medicine, P.O. Box 208018, New Haven, CT 06520-8018.

Yale University is an Equal Opportunity/Affirmative Action Employer.

## **POSITIONS OPEN**

#### ASSOCIATE DIRECTOR FOR RESEARCH Little Rock Geriatric Research Education and Clinical Center

The Departments of Biochemistry, Molecular Biology and Medicine at the University of Arkansas for Medical Sciences and the Little Rock VA Hospital are searching for an internationally known Ph.D. or M.D. SCIEN-TIST to head an existing, highly productive research group in molecular aspects of aging. The successful candidate will have a tenured professorship in the Department of Biochemistry and Molecular Biology, or Medicine, and will occupy about 2,500 square feet of laboratory space. Excellent start-up funds are available to equip the laboratories and support laboratory personnel. We seek an individual with demonstrated excellence in areas of cell function relevant to aging or age-dependent diseases, such as cancer, Alzheimer's disease or osteoporosis. Individuals with expertise in the regulation or glycolipid metabolism, are encouraged to apply. Send applications by January 15, 1995, including a résumé and names and addresses of three to five references to: Dr. Alan Elbein, University of Arkansas for Medical Sciences, Biochemistry and Molecular Biology, 4301 West Markham, Slot 516, Little Rock, AR 72205. The VA and University of Arkansas for Medical Sciences and University of Arkansas for Medical Sciences are Equal Opportunity Employers.

CLIMATE MODELLING—GLOBAL CHANGE RESEARCH. The Bermuda Biological Station for Research (BBSR) is requesting applications from active, motivated scientists with expertise in climate modeling and global change research and interests in medium-range to long-range climate forecasting and the effects of global climate change on time-scales of years to decades. He or she must be eager to develop independent research programs from extramural funds. The successful candidate will also play a key role in a new program to evaluate the societal and business relevance of current and future scientific prediction capabilities. The position is open at the ASSISTANT, ASSOCIATE or SENIOR SCIEN-TIST level. The proven ability to raise extramural funding is an asset. Interested scientists should send an application letter and a curriculum vitae by 15 December 1994 to: Dr Anthony Knap, Atlantic Global Change Institute, Bermuda Biological Station for Research, Ferry Reach, St George's GEO1, Bermuda. Telephone: 809-297-1880; Email: knap@bbsr.edu. BBSR is an Equal Opportunity Employer.

## SCIENTIST/PHYSICIAN/EDUCATOR

Noncommercial biomedical corporation near San Francisco needs full-time employee to develop and present seminars. Audience: health professionals.

Employer wants seminars on: nutrition; women's health issues; pharmacology; brain science; genetics; dermatology; and mental health

matology; and mental health. Applicant must have doctoral degree in an appropriate scientific discipline, publications, clinical experience, and excellent speaking skills. Salary range: \$35,000 to \$100,000 per year. Applicant

Salary range: \$35,000 to \$100,000 per year. Applicant must be willing to travel in the United States and lecture two to three times a week.

Please submit cover letter, résumé, and list of suitable lecture topics. Apply to: **Biomed International, 5801 Christie Avenue, Suite 400, Emeryville, CA 94608.** 

LAB CHEMIST. Perform lab research related to polyurethane foam and amide-modified polyisocyanurate foams, kineth characterization for the reaction between polycarboxylic acids and polyisocyanates, preparation and characterization of the quasi-prepolymers from aliphatic and aromatic polycarboxylic acids. Requirements: M.S. in Polymer Chemistry; authorization to work permanently in the United States; one year of experience in polyurethane foam and amide-modified polyisocyanurate foam development, prepolymer preparation and characterization, catalysts for trimerization reaction, ASTM testing method for rigid cellular materials, 40 hours per week. 8am–5pm. \$35,000 per year. Send résumés to: Jane Hosley, No.0345233, Department for Employment Services, 275 East Main Street, 2W, Frankfort, KY 40621. Equal Opportunity Employer.

## POSITIONS OPEN

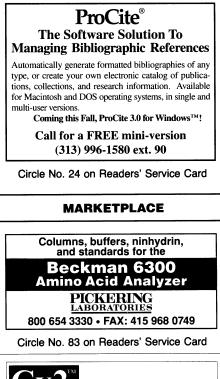
#### MICROBIOLOGY AND PATHOLOGY TEACHING POSITIONS

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

## **COURSES AND TRAINING**

The Department of Microbiology at The University of Texas at Austin invites students interested in research careers to apply for graduate study. Research areas include viruses and malignant transformation, membrane function, DNA replication and recombination, gene expression and development, immune mechanisms, yeast cell biology, and pathogenicity. All students admitted are assured of five years of financial support. For information, contact the Office of Graduate Affairs, Microbiology, UT, Austin, TX 78712; Telephone: 512-471-4181.

## **COMPUTER MARKETPLACE**





Circle No. 45 on Readers' Service Card Marketplace ads continue on page 1126

## IMPROVING THE QUALITY OF LIFE THROUGH ADVANCES IN R&D

In Baxter Healthcare Corporation's innovative environment, our professionals utilize the industry's best resources and latest technologies to improve the quality of life around the world. It's how we became a Fortune 75 leader. And why we have the following opportunities.

Right now, our growing Biotech Group's Gene Therapy Division is seeking two experienced professionals to join our 400 acre R&D campus in the northwest suburbs of Chicago.

Postdoctoral Position

## Cell Biology

You will play a key role in the development of an innovative approach to cancer immunotherapy. This will involve developing techniques for genetic manipulation of tumor cells implanted within immuno-isolation devices. We require a Ph.D. in cell biology, immunology or genetics. A broad background in tissue culture, ELISA assay development and molecular biology techniques is essential.

## SENIOR RESEARCH ASSOCIATE

## Cell Biology

While interfacing with device design engineers to investigate cellbiomaterial interactions, you will design new immuno-isolation modalities for implantation of cells for gene therapy, with a focus on hemophilia. We require a Ph.D. in Bioengineering, Biochemistry or Cell Biology, with knowledge of both engineering and cell biology principles. Experience with biomaterial implants, device design, animal surgery, cell biology, biochemistry and molecular biology techniques desirable. 1-3 years of postdoctoral experience is required.

We provide a highly professional environment conducive to career development and a competitive compensation and benefits program. Please send resume with salary history, indicating position of interest to: Human Resources, Dept. GT94119, Baxter Healthcare Corporation, Route 120 and Wilson Road, WG2-3S, Round Lake, IL 60073. An Equal Opportunity Employer.



## Just think if you could cure 80% of all disease

t's a striking fact that about 80% of all disease has a genetic base. That's why Genta's antisense technology, which takes aim at the genetic source of disease,

holds so much promise. In support of this exciting therapeutic development, Genta Pharmaceuticals Europe, a subsidiary of Genta, Inc. (San Diego), is expanding its European operations in Marseille

(France). We are seeking a multidisciplinary team of creative scientists: postdoctoral Ph.D.s and BS candidates with academic or industrial research experience in the following fields:

- Organic Chemistry
- Molecular/Cellular Biology
- Pharmacology & Formulation



Backed by our proprietary technology, secure funding and strong corporate alliances, Genta offers ambitious scientists an outstanding compensation package and a superb research environment on

the Luminy campus of the "Universite' d' Aix-Marseille II." Please send your resume to: Genta Pharmaceuticals Europe, 163, Av. de Luminy, Case 902, 13288 Marseille Cedex 09, France. We support diversity in our workplace.



## sanofi 💽 Winthrop

Due to the recent integration of the former Sterling Winthrop Pharmaceuticals Research Division into Sanofi Winthrop, many of our highly skilled employees will soon be seeking new career opportunities.

We invite you to contact us if you have opportunities for top notch, talented professionals in a variety of backgrounds including:

## B.S., M.S. and Ph.D. Level

Biologists

Pharmaceutical

- Chemists
- Drug Safety
  Information
- Systems
- Quality Assurance
- Finance
- Operations





SCIENCE • VOL. 266 • 11 NOVEMBER 1994

# Quality DNA for \$2,00 PER BASE, OPERON MUST BE ZUCCHANAS.

TO OFFER

## THE ZUCCHANA

You'd be bananas to pass this up. Or is that zucchanas? Operon now offers a  $0.2 \,\mu$ mol scale synthesis of custom DNA for just \$2.00 per base with a \$20 set-up fee. So you can afford to do more experiments, and get more results.

As the world's leading supplier of synthetic DNA, Operon gives you more than just a great price. We also offer unsurpassed purity, fast delivery, and an unconditional guarantee. Not to mention a customer service line that lets you speak to a person, not just a machine. And, of course, we still offer the lowest price on the larger  $1.0 \,\mu$ mol scale in the industry, at just \$2.80 per base with a \$20 set-up fee.

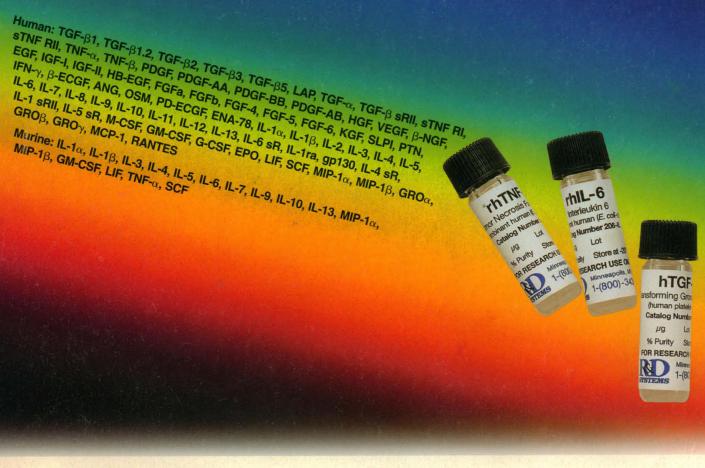
Quality DNA for \$2.00 per base. Now you don't have to settle for second best to save a bunch. For more information, or to place an order, call Operon at **1-800-688-2248**.



©1994 Operon Technologies, Inc., 1000 Atlantic Avenue, Alameda, CA 94501, USA. Phone: (510) 865-8644. Fax: (510) 865-5255. NIHBPA 263-00033233

Circle No. 70 on Readers' Service Card

# For Cytokine Biology...



# The widest range of Cytokines

## **BIOLOGICAL ACTIVITY:**

Full biological activity is assured. We bioassay all cytokines throughout purification, bottling, lyophilization, and periodically while they remain in stock.

## **EXTENSIVE RANGE:**

R&D Systems provides more than 75 cytokines. All are isolated, manufactured, and tested in the laboratories of R&D Systems.

## **HIGHEST PURITY:**

All cytokines are purified to greater than 97% purity as determined by SDS-PAGE visualized by silver stain, amino acid analysis, and N-terminal amino acid sequencing.

## **AVAILABILITY:**

All cytokines are available from stock. For labeling experiments, all cytokines are available carrier-free.

## To obtain a catalog, detailed product information or to place an order:

## In North America Contact:

**R&D Systems** 614 McKinley Place N.E. Minneapolis, MN 55413 Telephone: 800-343-7475 Fax: (612) 379-6580

## In Europe Contact:

R&D Systems Europe 4-10 The Quadrant, Barton Lane Abingdon, Oxon OX14 3YS Telephone: +44 (0)1235 531074 Fax: +44 (0)1235 533420 Funakoshi Co., Ltd. 9-7, Hongo 2-Chome Bunkyo-ku, Tokyo 113 Telephone: +81 (03) 56841622 Fax: +81 (03) 56841633

In Japan Contact:



Circle No. 63 on Readers' Service Card