# **Science** is working in Europe...

with an entire team committed to European growth

#### EDITORIAL

Manuscripts: Richard Gallagher, News: Daniel Clery

- Expert manuscript handling by European editors
- In-depth analysis of the latest scientific stories by our dynamic news team
- Including informed comment on the most vital research
   occurring in Europe

## MARKETING

Contact: Jane Pennington

- Working to increase circulation in Europe
  - Making subscription easy
- Providing a complete subscription service for Europe

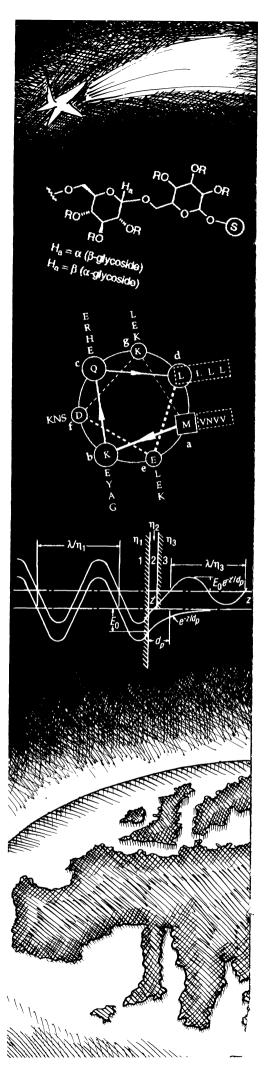
#### ADVERTISING

Classified: Annemarie Vis Display: Andrew Davies tel: 0457 838519 Tracey Peers tel: 0270 760108

- Giving the readers the best product information-
- Offering a comprehensive selection of international jobs and events
  - Ensuring the essential direct link between European advertisers and Science

# Authors, Subscribers and Advertisers can contact the European team at the:

Science Europe Office, Thomas House, 14 George IV Street, Cambridge CB2 1HH UK Tel: (44) 223 302067, Fax: (44) 223 302068



#### HANDBOOK OF MUCOSAL IMMUNOLOGY

#### Edited by

Pearay Ogra, Jiri Mestecky, Michael E. Lamm, Warren Strober, Jerry R. McGhee, and John Bienenstock

Handbook of Mucosal Immunology covers the entire spectrum of mucosal immunity and is organized in two main sections to present the basic biology of the common mucosal immune system and the immune responses of the mucosae.

Special Introductory Offer: \$195.00 January 1994, 800 pp., \$215.00 ISBN: 0-12-524730-3

#### **ATLAS OF HUMAN TUMOR CELL LINES**

Edited by Robert J. Hay, Jae-Gahb Park, and Adi Gazdar

#### **Key Features**

- Covers well-characterized tumor cell lines from the major human organ systems
- Presents over 250 photomicrographs, both phase-contrast and electron micrographs
- · Includes a list of key references for each chapter
- Written by world-renowned experts

January 1994, 518 pp., \$99.00 ISBN: 0-12-333530-2

#### NUTRITIONAL BIOCHEMISTRY

Tom Brody

Nutritional Biochemistry is an exciting and unique book that allows students to receive a hands-on perspective of the field. Each case study either leads to a subsequent discovery or enables an understanding of the physiologic mechanisms of action of various nutrition-related processes.

December 1993, 658 pp., \$75.00/ISBN: 0-12-134835-0

#### BIOCOMPUTING

Informatics and Genome Projects Edited by Douglas W. Smith

Biocomputing: Informatics and Genome Projects represents a survey of the needs and objectives of genome projects as of the early 1990's. It provides the groundwork necessary to understand genome-related informatics, including computational and database storage objectives. The book covers four general areas: automated laboratory notebooks, nucleic acid sequence analysis, protein structure, and database activities.

December 1993, 311 pp., \$49.95/ISBN: 0-12-653035-1

#### **GUIDE TO TECHNIQUES** IN GLYCOBIOLOGY

Edited by William J. Lennarz and Gerald W. Hart A Volume in the METHODS IN ENZYMOLOGY Series

Guide to Techniques in Glycobiology is designed to serve the needs of the student, experienced researcher, and newcomer to the field. It presents in one source and format a wide variety of methods, each of which provides background material explaining the basis of the method followed by detailed procedures.

New

994

litles

from

Comb Bound: \$55.00/ISBN: 0-12-443665-X Casebound: \$90.00/ISBN: 0-12-182131-5 January 1994, 624 pp.

#### **TECHNIQUES IN** PROTEIN CHEMISTRY V

Edited by John W. Crabb

Presents current methods in the following areas: protein sequencing and amino acid analysis; mass spectral analysis of peptides and proteins; peptide libraries; high-sensitivity protein and peptide separations; protein folding and NMR; functional domain analysis; and protein design and engineering.

Comb Bound: \$55.00/ISBN: 0-12-194711-4 Casebound: \$120.00/ISBN: 0-12-194710-6 February 1994, 548 pp.

#### **BIOMEDICAL SIGNAL** PROCESSING

Metin Akay

CONTENTS: Digital Signals and Systems. z-Transforms. Digital Filter Design. Discrete and Fast Fourier Transform Algorithms. Periodogram and Blackman-Tukey. CEPSTRUM. Adaptive Noise Canceling. Adaptive Line Enhancer. Adaptive Zero Tracking Methods. Autoregressive (AR) Method. Autoregressive Moving Average (ARMA) Method. Prony's Method.

February 1994, 416 pp., \$79.00 ISBN: 0-12-047145-0

#### HANDBOOK OF B AND T LYMPHOCYTES

Edited by

E. Charles Snow January 1994, 448 pp., \$99.00 ISBN: 0-12-653955-3

#### A PRACTICAL GUIDE TO THE STUDY OF **CALCIUM IN LIVING** CELLS

Edited by Richard Nuccitelli A Volume in the METHODS IN CELL BIOLOGY Series

A Practical Guide to the Study of Calcium in Living Cells describes popular techniques along with helpful do's and don't's and computer programs. The volume enables investigators to evaluate confocal images, use the latest dyes, and design Calcium buffers appropriate to their research needs.

Comb Bound: \$45.00/ISBN: 0-12-522810-4 Casebound: \$95.00/ISBN: 0-12-564141-9 March 1994, 392 pp.

ACADEMIC PRESS, INC. A Division of Harcourt Brace & Company Order Fulfillment Department, DM 17915

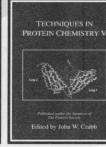
AB/TK/SW - 06034

Prices are subject to change without notice. © 1994 by Academic Press, Inc. All Rights Reserved.

Order from your local bookseller or directly from:

Circle No. 7 on Beaders' Service Card

6277 Sea Harbor Drive, Orlando, FL 32887



PLANT GROWTH AND DEVELOPMENT

Handbook of

Mucosal

A Molecular Approach Donald E. Fosket

Plant Growth and Development: A Molecular Approach teaches plant development through a comprehensive cellular and biochemical treatment for the advanced undergraduate student. The text is innovative in conception, well illustrated with two-color diagrams, and enhanced by the author's expertise in developmental, molecular, and cell biology.

March 1994, 580 pp., \$49.95/ISBN: 0-12-262430-0



# Who brings you the bigger picture in global information?

Unmatched in-depth

coverage & searching power make Dialog

your best global

information source.

For the best reception of business information from around the world, tune to Dialog. No one matches our breadth of in-depth

sources, our variety of topics or our geographic

coverage. And now our global business partner, Data-Star, covers European business in depth.

Whether it's competitive intelligence or consumer demograph-

ics, intellectual property or industry profiles, from Asia, Europe or the Americas, Dialog is the only source you need. You'll find more technical information than Mead. You'll also find the most up-to-date world news via Textline. Dialog combines unmatched content and coverage with powerful, efficiency-enhancing search tools no one else gives you. Our exclusive REPORT<sup>®</sup> function lets you create custom tables

> and export easily into standard spreadsheets. ALERTS<sup>™</sup> keep you current on the topic of your choice with automatic daily, weekly or monthly updates. Occasional

searchers can find many answers through our menu-driven Dialog Business Connection.

Get the bigger picture. To see how Dialog can answer any international business question you have, call Dialog Sales at 800-3-DIALOG.

The Answer is in Dialog Dialog Information Services, Inc. A Knight-Ridder Company

O1993 Dialog Information Services, Inc., 3460 Hillview Avenue, Palo Alto, California 94304. All rights reserved. DIALOG is a service mark of Dialog Information Services, Inc., Registered U.S. Patent and Trademark Office.
 Circle No. 32 on Readers' Service Card



#### NORMAL HUMAN CELL SYSTEMS™

In the BENELUX call SANBIO bv at: + 31 4132 51115 • In FRANCE call TEBU at: (01) 34 84 62 52 • In GERMANY & AUSTRIA call CellSystems, GmbH at: 49 + (02228) 8057 In ITALY call DIDspa at: (02) 4009 0222 • In JAPAN call KURABO Industries, Ltd. at: 0720 20 4504 • In SCANDINAVIA call Cytotech at: 45 + (042) 24 90 41 In SPAIN & PORTUGAL call LABCLINICS at: 34 + (93) 347 35 11 • In SWITZERLAND call BIOREBA AG at: + 41 61 712 11 15 In the UNITED KINGDOM & IRELAND call TCS Biologicals, Ltd. at: 44 + 0296 71 4071

© Clonetics Corporation 1993, all rights reserved.

## Products & Materials



Concentrator

The Model 24 mini CEL/VAC Concentrator is a small footprint instrument designed for DNA isolation research but that is also applicable for evaporation and recovery of other biological samples such as amino acids, peptides, and drugs. The vacuum chamber is formed by using a strong polycarbonate desiccator cover, which offers excellent visibility of the chamber. A lightweight 24-place rotor for 1.5- to 2-ml microcentrifuge tubes achieves a top speed of 1500 rpm in seconds and stops smoothly within 10 s without an electronic brake. The Model 48 CEL/ VAC Concentrator offers greater versatility than the Model 24, including a larger desiccator cover to use rotors of increased capacity, both in number of samples and volume, and a heater circuit to decrease evaporation times. CEL Associates. Circle139.

#### **DNA Sequencing Kit**

The PRISM Dye Primer UniCycle Kit saves time and reduces costs for DNA sequencing. These savings are achieved through a procedure that requires only one cycle (annealing, extension, and denaturation with Ampli-Taq DNA Polymerase) to yield enough fluorescence-labeled template for a strong, even signal. In addition, because the reaction time is short, no oil overlay is necessary to prevent sample evaporation. The procedure requires a minimum of 0.8 µg of single-stranded template, making it ideal for use with M13 phage,

asymmetric polymerase chain reaction products, and templates prepared by solid-phase methods. **Perkin-Elmer. Circle 140.** 

#### Laser Microdissection System

The LaserScissors microdissection system can be used as a stand-alone research tool or in conjunction with the manufacturer's companion products, the LaserTweezers 1000 and 2000. Designed to allow researchers to make submicrometer incisions in cells, cell processes (such as neurites), or organelles (such as chromosome microdissections), the new device also can ablate unwanted cells from among heterogeneous cultures. The compact LaserScissors module, including its focusing and steering optics, mounts directly on a standard microscope. Through use of a pulsed nitrogen dye laser with a standard emission wavelength of 390 nm, the device makes a quick (4 ns) and precise (spot size of less than 0.5-µm) incision. Cell Robotics. Circle 141.

#### Autoradiography Film for Sequencing

The Hyperfilm range of high resolution autoradiograph films is designed to maximize the detection of DNA sequencing products. Unlike conventional medical x-ray film, Hyperfilm has a clear, colorless base that provides excellent contrast between exposed and unexposed areas and improves the information available from a gel. Hyperfilm-MP is recommended for routine sequencing with <sup>35</sup>S, <sup>33</sup>P, and <sup>32</sup>P. Hyperfilm-Bmax is the premium film for reading the maximum sequence with <sup>35</sup>S and <sup>33</sup>P. Amersham International. Circle 142.

#### **Antibodies**

This line of monoclonal antibodies (mAbs) to cell surface antigens and signal transducers can be used in flow cytometry and immunoblotting for research in immunology, embryology, AIDS, and cancer. **PanVera Corp. Circle 143.** 

Eight different specificities of a mAb for varicella-zoster virus can be used in a variety of techniques. **QED. Circle 144.** 

Polyclonal antibody HA.11, specific for the nine-amino acid epitope from influenza hemagglutinin is useful in epitope tagging and protein surveillance studies. BAbCO. Circle 145.

The anti-mouse c-kit ACK2 mAb is specific to the extracellular domain of the proto-oncogene c-kit, which is crucial in the development of hematopoietic cells, germ cells, and melanocytes. Kamiya Biomedical. Circle 146.

#### DNA Sequence Data Searches

The DeCypher Sequence Similarity Search System is a new hardware and software workstation for performing fast DNA sequence databank searches. Searches can be performed without the need to establish a priori



search parameters. Results are presented through a color graphics interface so significant mat-

SCIENCE • VOL. 263 • 4 MARCH 1994

ches can be visualized on a single screen. DeCypher performs sequence similarity searches with supercomputer speed on a personal computer workstation platform. Accelerated search times are the result of the Sequence Similarity Engine technology that incorporates a proprietary parallel processing hardware architecture. **Time Logic. Circle 147.** 

#### High-Recovery Microconcentrator

The Microcon-50 microconcentrator provides a 50,000 molecular weight cut-off for concentrating and desalting small quantities of proteins and nucleic acids. It is especially suited for removing primer from polymerase chain reaction-amplified DNA. The device can be used to concentrate and desalt the DNA in one step, typically removing over 90% of the nonincorporated primers. Samples of up to 500 µl can be rapidly reduced to as little as 5 ul through use of a standard microcentrifuge. Amicon. Circle 148.

#### 

#### Literature

1993/94 Catalog & Handbook contains 64 pages of products for electrophoresis, including products for DNA sequencing, mutation detection, polymerase chain reaction analysis, and protein separations. AT Biochem. Circle 149.

The Eighth Edition of Linscott's Directory of Immunological and Biological Reagents tells where to find more than 47,000 different products: 13.000 monoclonal antibodies, 14,000 antisera and conjugates, and 20,000 other biomedical reagents, such as lectins, blood products, recDNA reagents, serum proteins, cytokines, immunoassay kits, tissues, microbial cultures and antigens, separation media, enzymes, hormones, peptides, and cell lines. For the first time, the directory is available on IBM-compatible floppy disks. Linscott's Directory. 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.



Circle No. 3 on Readers' Service Card

## AAAS

#### SCIENCE AND TECHNOLOGY POLICY YEARBOOK 1993

ALBERT H. TEICH, STEPHEN D. NELSON, AND CELIA MCENANEY, EDITORS Published by the American Association for the Advancement of Science

The past year witnessed great tumult and many changes in S&T policy. The AAAS Yearbook is an authoritative collection of articles that describe and helped shape those changes. Included are papers from the annual AAAS S&T Policy Colloquium and the 1993 AAAS Annual Meeting, together with excerpts from influential reports by the National Academies of Sciences and Engineering, the Carnegie Commission, the Senate Appropriations Committee, and the House Task Force on the Health of Science. The five parts of the book cover technology policy, science policy, defense conversion, manufacturing research, and environmental R&D.

1994; 424 pages; index; softcover; ISBN 0-87168-534-5 \$19.95 (AAAS member price \$15.95) *Mail your order to*: AAAS Distribution Center, PO Box 521, Annapolis Junction, MD 20701 If you prefer to order by phone (VISA/MasterCard only), call 1-800-222-7809 (8:30am-5:00pm ET) Fax orders to 301-206-9789

# Image: state of the state

## Science and HUGO Present THE GENES AND BEYOND

HORIZONS IN MEDICINE, BASIC RESEARCH, AND TECHNOLOGY

## **OCTOBER 2-5, 1994**

Mark your calendar now! For the fifth year, Science magazine and The Human Genome Organisation (HUGO) are pleased to sponsor the most comprehensive update on the genome project. The meeting will span issues in mapping, development, signal transduction, genome analysis, medical ethics, and policy.

The genome project is having a revolutionary effect on medical diagnosis, biotechnology, and investigations in cell and molecular biology.

• What are the newest advances in technology?

• How can the genome project be applied to understanding fundamental cellular processes?

• What are the latest developments in identifying disease genes?

• What are the social and policy issues facing us in the future?

For answers to these questions and a complete update on the genome project, don't miss this meeting! Call (703) 671-1400 today or send in the coupon for more information.

biology.	
Send me Hu	man Genome 1994 info today!
Name	
Title	
Organization	
Address	
City	
	Zip
Phone	
Fax	
	Global Trade Productions, Inc., 5203 Suite 1313, Fails Church, VA 22041. Fax (703) 671-7695.

WASHINGTON, D.C.

## Employment Exchange'94 upcoming events . . .



AAAS Southwestern & Rocky Mountain Division (SWARM) Annual Meeting Fort Lewis College 22-26 May 1994 Durango, Colorado

For information about meeting or exhibit registration, contact: Dr. Donald Nash, Executive Director, AAAS SWARM Division, Colorado State University, Biology Department, Fort Collins, CO 80523; Phone: (303) 491-5481.

AAAS Pacific Division Annual Meeting San Francisco State University 19-23 June 1994



For information about meeting registration, contact: Dr. Alan Leviton, Executive Director, AAAS Pacific Division, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118; Phone: (415) 752-1554. AAAS brings you more in '94!

Career Development Seminars

Year-round Resume Referrals

Candidate Database File Searches

Employment Exchange Quarterly Bulletin

Science Career Fairs

For more information about the Employment Exchange contact Jacquie Roberts or Laurie Baker at: AAAS EMPLOYMENT EXCHANGE, 1333 H Street, NW, Suite 1163, Washington, DC 20005 USA, or via phone at (202) 326-6737; via email : JROBERTS@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. Advertisements 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.
- Mail or FAX materials to: Science Classified Advertising 1333 H Street, N.W., Room 814 Washington, DC 20005 Telephone: 202-326-6555 FAX: 202-682-0816
- 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.
- 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 Annemarie Vis at +44 223 302 067 (telephone) or +44 223 302 068 (FAX).
- Credit Cards: Science accepts 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. about fractional display ads (all ads 1/6 page and larger), contact:

> Recruitment Advertising Deborah Cummings Telephone: 202-326-6541

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

Annemarie Vis European Recruitment Advertising Telephone: +44 223 302 067 FAX: +44 223 302 068

**CONDITIONS:** Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

#### **POSITIONS OPEN**

#### MICROBIOLOGIST

The Department of Biology at Central Michigan University, Mt. Pleasant, MI 48859 invites applications for a ten-month tenure-track faculty position in environmental or medical microbiology at the ASSIST-ANT PROFESSOR level to begin August 1994. Applicants must have a minimum of one year of postdoctoral research experience. The successful candidate will be expected to participate in undergraduate and graduate teaching in general microbiology and a specialty area, and to establish an active research program. Send curriculum vitae, statement of teaching interests and research objectives as well as the names, addresses, and telephone numbers of at least three references by April 1, 1994. *Central Michigan University (Affirmative Action/Equal Opportunity) encourages diversity and resolves to provide equal opportunity regardless of race, sex, disability, or sexual orientation.* 

#### FACULTY POSITION IN PHARMACEUTICS SUNY AT BUFFALO

We are seeking candidates for a tenure-track ASSIST-ANT PROFESSOR in basic pharmaceutics, drug delivery, drug analysis or drug metabolism. Ph.D. plus suitable postdoctoral experience required. The successful candidate is expected to establish an independent research program and participate in departmental instruction. Apply by May 30, 1994, with curriculum vitae, three letters of reference, and a summary of research interests to: Dr. H.-L. Fung, Chair, Pharmaceutics, Cooke Hall, SUNY, Buffalo, NY 14260. The University is an Equal Opportunity/Affirmative Action Employer.

#### MOLECULAR BIOLOGY FACULTY POSITION

The Department of Anatomy and Neurobiology at the Medical College of Pennsylvania is seeking a molecular biologist for a tenure-track faculty position at an **ASSO-CIATE** or **FULL PROFESSOR** level. Applicant must have an established, funded research program that utilizes molecular approaches to address important questions in neuroscience or developmental or cellular biology.

Applicants should send curriculum vitae, a statement of research interests and names of three referees to: Dr. Donald Faber, Chairman, Department of Anatomy & Neurobiology, The Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129. Deadline for applications is May 1, 1994. The Medical College of Pennsylvania is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minorities.

#### TENURE-TRACK FACULTY POSITION

Applications and nominations are invited for an AS-SISTANT PROFESSOR to join an established, research-oriented department with a long-standing record of strong extramural support. Candidates must be using modern techniques to study significant biological questions at the molecular and/or cellular level, preferably involving signal transduction, receptors or ion transportors. Applicants should have two or more years of relevant postdoctoral experience, and show superior program within an academic setting. The campus is located in a suburban area of Toledo, a community offering a family-oriented lifestyle with many recreational, educational and cultural opportunities. Applicants should send curriculum vitae, names and addresses of at least three references, and a description of current and future research to: Howard C. Rosenberg, M.D., Ph.D., Chair of Faculty Search Committee, Department of Pharmacology, Medical College of Ohio, Toledo, OH 43699–0008. Evaluation of candidates will begin April 15, 1994. The Medical College is an Affirmative Action/Equal Opportunity Employer.

FACULTY/RESEARCH POSITIONS. The University of Puerto Rico Medical School, a fully accredited research and teaching institution invites applications for two tenure-track ASSISTANT PROFESSOR positions for molecular biologists with research interests related to pharmacology/physiology. Areas of special interest are: gap junctions, secretory processes, oxygen biology, membrane transport and mesangial cell function. Send applications including curriculum vitae and names of three references to: Dr. Emma Fernández-Repollet, RCMI Program Acting Director, University of Puerto Rico, Medical Sciences Campus, P.O. Box 365067, San Juan, PR 00936–5067.

#### **POSITIONS OPEN**

#### UNIVERSITY OF WISCONSIN-RIVER FALLS TENURE-TRACK POSITION BIOLOGY DEPARTMENT-CELL/MOLECULAR

ASSISTANT PROFESSOR to teach undergraduate courses, including biology, cell biology and molecular biology and participation in interdisciplinary major in biotechnology. Active research and scholarly activities encouraged; teaching is primary mission of the University. Other responsibilities include student advising and committee work. Ph.D. in relevant discipline, evidence of teaching potential required; experience in animal histology desired. To apply send curriculum vitae, unofficial transcripts, three reference letters to: Dr. James W. Richardson, Search and Screen Committee, Biology Department, University of Wisconsin–River Falls, River Falls, WI 54022. All required material must be received no later than April 14, 1994. Affirmative Action/ Equal Opportunity Employer.

The Forestry Department at Northern Arizona University invites applications for a 9-month tenure-track **ASSISTANT PROFESSOR** position, to teach Conservation Biology and Forest Genetics and develop an externally funded research program. Applicants must have a Ph.D. with emphasis in **CONSERVATION AND ECOLOGICAL GENETICS OF FOREST VEGETATION**, and education and experience in quantitative field methods and statistical analysis. Preference given to candidates with evidence of teaching ability, and a degree and experience in forestry. The Department has an undergraduate program featuring integrated team teaching, offers M.S. and Ph.D. degrees, and occupies a new well-equipped facility which also houses U.S. Forest Service research. Flagstaff is in a ponderosa pine forest and near life zones ranging from desert to alpine tundra. Please send statement of qualifications, résumé, 3 recommendation letters, recent reprints, and transcripts to: **Paul Beier**, **NAU Forestry, Flagstaff, AZ 86011–5018. Telephone: 602-523-9341. Equal Opportunity/***Affirmative Action Employer*.

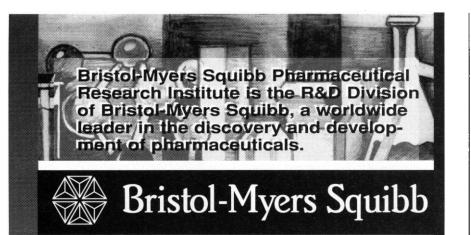
ECOLOGIST. The Department of Biology invites applications for a tenured **PROFESSORSHIP** (head of the laboratory) in ecology. Each laboratory consists of a professor (this position), an associate professor, and two assistant professors. The department has ten laboratories, and five more laboratories join for the graduate school. Wishes to recruit an individual with an outstanding record in the research of his or her interest. Teaching graduate and undergraduate courses required. No discrimination by nationality, religion or sex. Salary determined by governmental rule and depending on research or teaching experience. Japanese or English proficiency required. Expected to hold the position at least for six years (renewable every three years). Submit a publication list, curriculum vitae, major reprints, statement of research goals, and two letters of recommendation by April 30, 1994, to: Yoh Iwasa, Department of Biology, Faculty of Science, Kyushu University, Fukuoka 812, Japan. (FAX: +81-92-632-2741.)

#### HARVARD MEDICAL SCHOOL CENTER FOR BLOOD RESEARCH ASSISTANT PROFESSOR

The Department of Pathology at Harvard Medical School and the Center for Blood Research are jointly seeking to fill an Assistant Professorship. The candidate is expected to direct a vigorous, independent research program. Laboratory space is in the newly constructed Warren Alpert Building on the main quadrangle at Harvard Medical School. This field of search is lymphocyte development and differentiation, with particular emphasis on signal transduction and gene targeting in animal models. The position offers significant scientific and scholarly resources, a collegial environment, and the candidate will participate in teaching graduate and medical students.

Candidates should send curriculum vitae and statement of research interests, and three references to: Professor Timothy A. Springer, Search Committee Chair, Center for Blood Research, Box 3, Room 251, 200 Longwood Avenue, Boston, MA 02115.

**200 Longwood Avenue, Boston, MA 02115.** Harvard Medical School is an Affirmative Action/Equal Opportunity Employer. Qualified female and minority applicants are encouraged to apply.



## POSTDOCTORAL FELLOWS

Bristol-Myers Squibb Pharmaceutical Research Institute is currently accepting applications for fully-funded two-year, postdoctoral positions in the following disciplines:

#### Molecular and Cellular Biology/ Cardiovascular Drug Discovery Cardiac Gene Expression

#### **Department of Cardiovascular Drug Discovery/Molecular and Cellular Biology** – Participate in a new research program directed toward the isolation and characterization of novel molecules intimately associated with normal cardiac function and cardiac disease states. Interested candidates should possess a strong, productive background in molecular biology (cDNA library construction, gene regulation, recombinant protein purification and mammalian cell expression). Investigations will focus on discovery and analysis of the structure, function and regulation of genes and gene products involved in the progression of cardiovascular disease. Please reply to: **Dept. PRI-JW-0454.**

#### Molecular Biology/Oncology Tumor Suppressor Genes/ Signal Transduction

**Department of Molecular Genetics and Cell Biology** – Study tumor suppressor genes and signal transduction mechanisms relevant to human cancers. Candidates should possess strong molecular biology experience, including recombinant DNA technology (cDNA cloning, DNA sequencing, etc.), and a background in mammalian cell gene expression. Research experience in protein purification or mammalian cell biology is also desirable. Please reply to: **Dept. PRI-JW-0430** 

## Macromolecular Crystallography

**Department of Macromolecular Crystallography** – Work independently and collaboratively in a group that includes senior scientists, postdoctoral fellows and research associates. You will participate in all levels of protein crystallography from crystallization to refinement and structure analysis. A Ph.D. in Biochemistry, Chemistry or related discipline and research experience in macromolecular crystallography is required. Please reply to: **Dept. PRI-JW-0003.** 

Send curriculum vitae and the names of three references to: Human Resources Department, Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000, Princeton, NJ 08543-4000. Equal Opportunity Employer, M/F/D/V.

#### **POSITIONS OPEN**

PHARMACOLOGY/TOXICOLOGY; ASSIST-ANT PROFESSOR, tenure-track position beginning July 1, 1994. Ph.D. in Pharmacology/Toxicology required. A degree in pharmacy is desirable. Team teaching of biomedical science and graduate courses, student advising, and extramural-supported scholarly research is expected. Submit letter of intent, curriculum vitae, statement of research interests, names, addresses and telephone numbers of three references to: F. W. Fochtman, Ph.D., Chair, Search Committee, Department of Pharmacology/Toxicology, School of Pharmacy, Duquesne University, Pittsburgh, PA 15282.

WETLANDS ECOLOGIST. Tenure-earning AS-SISTANT PROFESSORSHIP. Teaching responsibilities include a graduate core course in wetlands ecology, and other courses in appointee's area of interest. The University of West Florida campus houses modern laboratory facilities and is located on a 1000-acre nature preserve. Various types of wetlands are found on or near the campus. While maintaining a reputation for teaching excellence, the biology faculty are active in research, and a strong research program will be expected and encouraged. Ph.D. required. Salary negotiable. Send curriculum vitae, statements of research and teaching interests, selected publications, and 3 letters of recommendation, by April 12, 1994, to: Dr. Paul Hamilton, Ecology & Evolutionary Biology, University of West Florida, Pensacola, FL 32514. UWF is an Equal Opportunity Access/Affirmative Action Employer.

ASSISTANT PROFESSOR: Tenure-track. Teach rotation of courses: General Biology I and II (majors), Principles of Biology (non-majors), Human Anatomy and Physiology (lower-division course), Developmental Biology, Comparative Vertebrate Anatomy, Animal Physiology. Conduct research with undergraduate assistants. Advise Biology/Biochemistry majors. Accept committee appointments. Review begins March 25, 1994. Submit application, curriculum vitae, 3 reference letters and official transcripts to: Dr. Daniel Bowen, Benedictine College, 1020 North 2nd, Atchison, KS 66002. Equal Opportunity Employer.

#### WORCESTER STATE COLLEGE Worcester, Massachusetts

Applications are invited for two full-time tenure-track ASSISTANT PROFESSOR positions starting in September 1994. Requirements include a Ph.D., strong commitment to teaching and promise in research. Familiarity with liberal arts college education, teaching experience and/or postdoctoral training are desirable. We expect candidates to teach introductory courses, upperlevel electives and help expand our undergraduate and graduate programs. Areas of speciality are: (1) Applied Microbiology and (2) Human Physiology (courses to be developed and taught include Pathophysiology, Kinesiology, Gross Anatomy, and Exercise Physiology). Letters of interest and curriculum vitae (both required before you receive our formal application packet and supplemental information) should be sent to: Director of Personnel, Worcester State College, 486 Chandler Street, Worcester, MA 01602. Deadline for applications is April 1, 1994, or until the positions are filled.

tions is April 1, 1994, or until the positions are filled. Worcester State College is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

> ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Biological Sciences at the University of North Texas invites applications for a tenure-track faculty position in Microbiology at the Assistant Professor level. Candidates with a Ph.D. in microbiology and related postdoctoral experience are encouraged to apply. The successful candidate will participate as a member of the Microbiology Division within the Department and will be expected to establish an extramurally funded research program and participate in undergraduate and graduate microbiology instruction. Candidates able to apply molecular biology and biochemical methods to fundamental and applied problems in bacteriology, physiology or ecology will be considered. Send curriculum vitae, a summary of research plans, relevant publications and the names of three references to: Dr. Daniel A. Kunz, Chair of the Search Committee, Department of Biological Sciences, University of North Texas, P.O. Box 5218, Denton, TX 76203. Applications will be accepted until April 15, 1994, or until the position is filled. The University of North Texas is an Equal Opportunity/Affirmative Action Employer.



FACULTY POSITION in Neuroscience: The Cellular and Clinical Neurobiology (CCN) Ph.D. Training Program in the Department of Psychiatry invites applications from neuroscientists for tenure-track positions at the level of ASSISTANT, ASSOCIATE or FULL PROFESSOR. Candidates using molecular approaches for the study of ion channels are of particular interest although outstanding neuroscientists with other research interests are strongly encouraged to apply. The successful candidate will interface with existing faculty, have a strong commitment to graduate education (Ph.D. and M.D.). Research interest of the eight basic science faculty in the CCN is currently focused on neuronal function using pharmacological, biochemical, molecular, and behavioral approaches. The CCN program provides clinical research opportunities with neuroscientists working in the areas of Parkinsonism, anxiety, drug abuse, schizophrenia and affective disorders. Competitive salary and set-up funds are available. Please send curriculum vitae, statement of research interests, and names of 3 references to: Dr. Thomas Uhde, Chairman, Department of Psychiatry, Wayne State University School of Medicine, UHC-9B, 4201 St. Antoine, Detroit, MI 48201. WSU is an Equal Opportunity/Affirmative Action Employer.

#### BIOCHEMICAL ENGINEER/ FERMENTATION SCIENTIST

Applicants sought: ASSISTANT PROFESSOR, tenure-track. Conduct research in winemaking/fermentation science, establish basic research program, teach in enology/ biochemical engineering. Must have a Ph.D. in Chemical or Biochemical Engineering, an outstanding academic record, a commitment to high-quality undergraduate/ graduate education, ability to develop research program of national recognition. Send curriculum vitae, publication list/reprints, teaching/research interest statements, graduate transcripts, name/address of 3 referees by May 1, 1994, to: Roger Boulton, Search Committee Chair, Viticulture and Enology, University of California, Davis, CA 95616–8749. Telephone: (916) 752-0900/752-1717. FAX application unacceptable. University of California is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION Department of Molecular and Medical Genetics Oregon Health Sciences University (OHSU) Portland, Oregon

Applications are invited for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. The Department seeks individuals who have demonstrated excellence in research. Preference will be given to candidates with interests in eukaryotic molecular, cellular or developmental genetics. Applicants should have an M.D. or Ph.D. degree and include curriculum vitae, a brief description of research goals, and the names of three references. Please address applications to: R. Michael Liskay, Department of Molecular and Medical Genetics, L103, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098. OHSU is an Equal Employment Opportunity/Affirmative Action Employer (UPAR#1656).

MICROBIOLOGY/IMMUNOLOGY: ASSIST-ANT PROFESSOR, tenure-track, beginning August 1994. The position is primarily teaching oriented; however, collaborative research in reproductive biology or aquatic ecology is anticipated. Duties include teaching courses in microbiology and immunology, and coordinating the Clinical Laboratory Sciences program; other teaching responsibilities may be possible. The appointee is expected to establish a record of scholarly activity in the collaborative and/or pedagogical areas. Salary is dependent on qualifications and experience. Application deadline: April 11, 1994. Ph.D. required and postdoctoral experience preferred. Submit a letter of application, curriculum vitae, copies of representative publications, arrange for early arrival of all transcripts and three letters of recommendation to: Dr. C. E. Wickstrom, Microbiology Search Committee, Department of Biological Sciences, Box 100, Kent State University, Kent, OH 44242. Kent State University is an Equal Opportunity/ Affirmative Action Employer. Pfizer, a Fortune 100 company, one of the largest pharmaceutical companies in the world and a multi-million dollar industry leader, can offer you a world of challenge, opportunity and achievement where you can make a significant contribution to the research and development of exciting new products to be introduced in the coming decade...and the new century.

Pfizer Central Research Laboratories in Groton, Connecticut are the company's primary U.S. research facilities committed to creating a healthier world population. In addition, the Central Research Laboratories represent one of only a handful of R&D organizations with a budget over \$1 billion to support continued advances in science. To accomplish that goal we are actively recruiting **BIOCHEMISTS AND BIOCHEMICAL PHARMA-COLOGISTS** with a PhD, MS or BS to be involved in the discovery of new human medicinal therapeutics.

## pplied Biotechnology and High Throughout Screening

#### **PhD Scientist**

Our Applied Biotechnology group has an opening for a highly motivated scientist who shares a keen interest in the discovery of novel therapeutics. We are seeking an individual with experience in receptor/ligand interactions and a strong background in Biochemistry or Biochemical Pharmacology to play a key role in discovering novel pharmaceuticals in a variety of therapeutic areas. As a member of our Applied Biotechnology group, you will collaborate with researchers in specific disease areas to identify/validate new therapeutic targets. Your responsibility will include assay development and the implementation of several high throughput screens to identify novel lead structures from both natural products and synthetic file compounds. The scope of these activities requires that the successful applicant possess strong communication and interpersonal skills. Experience with assay development, high throughput screening, or automation is desirable but, not essential.

#### **MS/BS Scientist**

Our Applied Biotechnology group has an opening for a self-starting MS scientist (or BS with 1-3 years experience) with a background in Biochemistry or Cell Biology. The successful candidate will develop and perform high throughput assays and report results to their supervisor and project team. Good organization, communication and interpersonal skills are necessary.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plan, pension plan, relocation assistance and more. Our R&D facility located in a southeastern Connecticut shore community, gives access to the well known academic and cultural centers of the Northeast and offers the attractions of a New England lifestyle.

To learn how you can be part of the future of Pfizer, send your resume to: Mr. Kym Goddu, Assistant Manager, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



**Central Research** Bringing science to life.

#### SENIOR FACULTY POSITION Department of Biochemistry University of Illinois College of Medicine at Chicago

Applications and nominations are invited for a senior-level tenured faculty position of **ASSOCIATE** or **FULL PROFESSOR**. We are seeking applicants who have a strong record of research accomplishments, a nationally/ internationally recognized, funded research program and a commitment to teaching. All areas of biochemistry will be considered. We are particularly interested in scientists using transgenic mouse technology to investigate prob-lems related to gene regulation in the context of moleclems related to gene regulation in the context of molec-ular biology and medicine, development, signal transduc-tion and molecular immunology. The Department is one six basic science departments in the largest College of Medicine in the United States, and consists of 19 full-time faculty and 13 joint appointees. The department, college and campus are well equipped and have research facilities that will support any area of contemporary bio-medical research. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include curplans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after November 1, 1993. Send applications will begin after November 1, 1993. Send applications or nominations to: Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmation Action/Eaud an Affirmative Action/Equal Opportunity Employer.

#### ASSISTANT/ASSOCIATE PROFESSOR ANATOMY AND CELL BIOLOGY

Applications are invited for a tenure-track position in the Department of Anatomy and Cell Biology, Univer-sity of North Dakota School of Medicine. Applicants must hold a Ph.D., M.D. or equivalent with at least two years of postdoctoral training and research experience in Cell Biology, Molecular Biology or related areas. The successful candidate will be expected to carry on a vigorous, extramurally funded research program in his/ her respective field. A demonstrated potential to collab-orate with clinical researchers will be important for the successful candidate. Applicants should poesses expertise successful candidate. Applicants should possess expertise in Human Gross Anatomy and be willing to contribute substantially to a team-taught Human Gross Anatomy course for medical students. A major teaching contribu-tion in the Departmental Graduate Program is also required. Send curriculum vitae, descriptions of research required. Send curriculum vitae, descriptions of research and teaching experience and three letters of reference by May 15, 1994, to: Dr. Jean C. Oberpriller, Chair, Anatomy and Cell Biology Search Committee, De-partment of Anatomy and Cell Biology, University of North Dakota School of Medicine, Grand Forks, ND 58202. The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites appli-cations from all qualified individuals.

#### HARVARD MEDICAL SCHOOL CENTER FOR BLOOD RESEARCH ASSISTANT PROFESSOR

The Department of Pathology at Harvard Medical School and the Center for Blood Research are jointly seeking to fill an Assistant Professorship. The candidate is expected to direct a vigorous, independent research expected to direct a vigorous, independent research program. Laboratory space is in the newly constructed Warren Alpert Building on the main quadrangle at Harvard Medical School. The field of search is lympho-cyte development and differentiation, with particular emphasis on signal transduction and gene targeting in animal models. The position offers significant scientific and scholarly resources, a collegial environment, and the candidate will participate in teaching graduate and med-ical students. ical students. Candidates should send curriculum vitae and state-

ment of research interests, and three references to: Pro-Ment of research interests, and three references to: Pro-fessor Timothy A. Springer, Search Committee Chair, Center for Blood Research, Box 3, Room 251, 200 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Affirmative Action/Equal Opportunity Employer. Qualified female and minority appli-cants are encouraged to apply.

#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR

VISUAL NEUROPHYSIOLOGIST. The Department of Ophthalmology, West Virginia University, in-vites applications for a tenure-track position available in the summer of 1994, with a joint appointment in the Department of Physiology. We seek a Ph.D. with 2 years of postdoctoral training and a strong publication record. The appointee will participate in the institution's planned expansion of neuroscience. The Health Sciences Center has state-of-the-art research facilities and a PET scanning center is under development. The clinical electrophysiol-ogy laboratory (ERG, EOG, VEP, psychophysical test-ing) can also be used for research. Salary, space, and start-up money will be commensurate with qualifications. The appointee will be expected to establish an indepensearch program and provide research training for clinical residents and graduate students. Send curriculum vitae, reprints of recent publications, a brief statement of Vitae, reprints of recent publications, a other statement of future research plans, and list of three references by April 15, 1994, to: Dr. Paul Brown, Department of Physi-ology, West Virginia University Health Sciences Cen-ter, Morgantown, WV 26506. West Virginia University is an Affirmative Action/Equal Opportunity Employer.

ORGANIC CHEMIST-The Chemistry Department of Wesleyan University invites applications for a tenure-track position in organic chemistry at the AS-SISTANT PROFESSOR level, effective September 1995 or possibly earlier. Although all areas of research will be considered, preference will be given to candidates who best complement the research interests of the faculty. The successful candidate will exhibit the potential for ty. In e successful candidate will exhibit the potential for excellence in both teaching (undergraduate and graduate level) and research in a well-equipped department with an active Ph.D. program (presently 12 full-time faculty and 35 graduate students), and will be expected to aggressively pursue outside funding. Salary, fringe ben-efits, and start-up funds will be highly competitive. Interested applicants should submit curriculum vitae and Interested applicants should submit curriculum vitae and a brief description of research plans, and have three letters of reference sent to: Chair of the Organic Search Committee, Department of Chemistry, Wesleyan University, Middletown, CT 06459 by May 1, 1994. Wesleyan University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority candidates.

BIOLOGY: ASSISTANT PROFESSOR (tenuretrack) to teach undergraduate lecture and laboratory courses in Microbiology. Interest and ability to teach General Biology and one or more of the following: Molecular Biology, Developmental Biology, Genetics, Immunology. Ph.D. required, computer literacy expect-Immunology. Ph.D. required, computer literacy expect-ed. Salary and benefits competitive. Review of completed applications begins April 1, 1994. Send letter of appli-cation (include position #FS8813), résumé, transcripts and three letters of reference to: Search Committee Chair, Department of Biology, Adams State College, Alamosa, CO 81102; Telephone: 719-589-7256. Affirmative Action/Equal Opportunity Employer.

#### We'll Help You Build A New Lab



Let the free Science product information service put you in touch with the vendors whose products vou will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

SCIENCE Magazine New Lab Service Department, Rm. 830, 1333 H Street, N.W., SCIENCE Washington, DC 20005

#### **POSITIONS OPEN**

#### **TEACHING POSITION IN** PHYSIOLOGY/PHARMACOLOGY

The Department of Pharmacodynamics in the College of Pharmacy at the University of Florida is seeking an ASSISTANT/ASSOCIATE SCHOLAR to join the department August 12, 1994. The position is a 9-month, non-tenure-accruing faculty position renewed annually. The primary duty will be to teach portions of three departmental courses for undergraduate pharmacy students: Physiology, Pharmacology, and Pathophysiology. Responsibilities will also include academic advisement of pharmacy students, membership on College and Universiry committees, and scholarship. Applicants must have a Ph.D. in Physiology, Pharmacology or a related field, and should have previous teaching experience. Applicants should submit curriculum vitae, a statement of teaching experience and interests, and the names of three references by April 15, 1994, to: Dr. Maureen Keller-Wood, Chair, Pharmacodynamics Search Committee, Box 100487, University of Florida, Gainesville, FL 32610.

If any candidate needs an accommodation for this position, please contact Dr. Maureen Keller-Wood at (904) 392-3408. The University of Florida is an Equal Opportunity/Affirma-tive Action Employer.

SIX TENURE-TRACK POSITIONS, 12-month, ASSISTANT/ASSOCIATE, are available in the University of Maryland School of Pharmacy. Areas include Biotechnology-derived Products, Immunology, Medicinal Chemistry, Molecular Pharmacology, Solids Formu-lation, and Biochemical Pharmacology. Please refer to our ad in the February 18, 1994, issue of *Science*. Submit curriculum vitae and research plan to: P. Callery, Phar-maceutical Sciences Department, University of Maryland, 20 North Pine Street, Baltimore, MD 21201. Review of applicants will begin April 1, 1994. The University of Maryland is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

## PERFUSION TECHNOLOGY FACULTY POSITION

The Cardiovascular Perfusion Program in the School of Natural and Health Sciences at Barry University is seeking an ASSISTANT/ASSOCIATE PROFES-SOR. Responsibilities include didactic instruction in Anatomy and Physiology, Pathology and Perfusion Sci-ence as well as minor clinical education. A Ph.D. is preferred and teaching experience required. Preference will be given to candidates who are currently certified clinical perfusionists. Please send résumé, salary requirements, and three letters of recommendations by April 15, 1994, to: Jason Freed, CCP, Program Director, Barry University, CVP, Adrian #213, 11300 NE 2nd Avenue, Miami Shores, FL 33161-6695.

ASSISTANT PROFESSOR-NUTRITION. Ten-ASSISTANT PROPESSOR—NUTRITION. Ich-ure-track, 9-month teaching and research position, Au-gust 1994. Ph.D. in human nutrition or related area required, research experience in energy metabolism or obesity preferred. Send curriculum vitae, transcripts, brief statement of philosophy on teaching and research, and have three letters of recommendation sent to: Dr. Vethorie Concernant of Product and And have three letters of recommendation sent to. Dr. Katharine Grunewald, Department of Foods and Nutrition, Kansas State University, Manhattan, KS 66506–1407 by April 15, 1994. (Telephone: 913-532-5508, FAX: 913-532-3132). Affirmative Action/ Equal Opportunity Employer.

OCEANOGRAPHER. The School of the Environment of Duke University invites applications for a ten-ure-track position at the rank of ASSISTANT PROure-track position at the rank of ASSISTANT PRO-FESSOR in Oceanography with emphasis on benthic boundary layer dynamics. We particularly encourage applicants interested in quantitative approaches to inter-disciplinary problems. Applicants with backgrounds in physical, geological, chemical or biological oceanography are invited to consider this position. The new faculty member will be resident at the Marine Laboratory in Beaufort, North Carolina, and will be expected to con-tribute substantively to Duke's teaching and research programs in the ocean sciences. The target date for initial review of applications is 1 May 1994. review of applications is 1 May 1994.

Send curriculum vitae, names of three evaluators, and a letter of teaching and research interests to: J. Ramus, Director, Duke University Marine Laboratory, Beau-fort, NC 28516–9721. Telephone: 919/728-2111, jramus@acpub.duke.edu.

Duke University is an Equal Opportunity/Affirmative Action Employer.

## **3M** Senior Toxicologist

The Department of Pathology and Toxicology within 3M Pharmaceuticals is looking for a senior toxicologist with a minimum of five years of industrial experience, preferably in pharmaceuticals. Requires experience in supervising technical individuals in the conduct of toxicology studies for pharmaceuticals and medical devices. Previous hands-on experience as a study director on GLP studies and the preparation of documents for submission to FDA and worldwide regulatory agencies are required. Must have good interpersonal skills and good oral and written communication skills. Experience in dealing with contract laboratories preferable but not required.

This position will be responsible for supervising technical personnel in the conduct of in-house toxicology studies and will serve as the toxicology registration strategy for new chemical entities and medical devices and will interface with the FDA and other global health care regulatory agencies in the registration of new pharmaceuticals and devices. Board certification or willingness to pursue certification is necessary.

3M Pharmaceuticals is an excellent example of a company which believes in empowerment at the individual team level, and allows its employees to have a direct impact on the future of the company. Minnesota is a very progressive state and offers ready access to diverse metropolitan communities as well as outstanding outdoor recreation.

3M offers an excellent benefits package with salary commensurate with experience. For confidential consideration, please submit your resume (no telephone inquiries or employment agency referrals please) to:

#### **NAS Reply Service**

Dept. 3MP18 One Appletree Square Minneapolis, MN 55425

Equal Opportunity Employer M/F/D/V

## Procter&Gamble

#### TECHNICAL INFORMATION SERVICES

Consider an exciting career with a leading company committed to research and development and the important role technical information professionals can play in our success. We have several openings for highly motivated individuals to join our Technical Information Services group in Cincinnati, Ohio.

#### ■ INFORMATION SCIENTISTS

You will lead efforts to provide retrospective and current awareness searching of internal and external literature. patent and structure databases. Other responsibilities will include developing awareness of information services, training end users in search system capabilities, and setting up and maintaining product databases for technical and business customers. Several openings will be in our Health Care Sector, where successful applicants will develop strong expertise in the therapeutic area of concern to the customer group. Requirements include a BS/BA or MS/MA in the physical or life sciences; an MLS/MIS is preferred. Three to five years of experience in performing technical information searches, knowledge of PC software and LAN technology are desirable. Strong interpersonal and communication skills are essential.

Procter & Gamble is a world leader in the research, development, manufacture and marketing of consumer products in the beauty care, cosmetics & fragrances, food & beverage, health care, laundry & cleaning, paper and pharmaceuticals sectors. Annual sales exceed \$30 billion, and our annual R&D investment is more than \$1 billion.

P&G offers immediate, meaningful responsibility with thorough, customized on-the-job training and continuing education opportunities, and promotion from within based on the results you achieve. By 1995, we will begin occupying our new \$282 million Health Care Research Center located north of Cincinnati. In addition, we have four existing state-of-the-art technical centers in the Greater Cincinnati area. P&G offers a competitive salary and benefits package placing us among the top 5% of U.S. firms.

For confidential consideration, please send a letter of introduction and resume to:

Procter & Gamble R&PD Technical Recruiting, Dept. PJ4SC4 6090 Center Hill Avenue Cincinnati, OH 45224-1792

> No agency referrals, please. An Equal Opportunity Employer

#### CHAIR Department of Health Studies The University of Chicago

The Division of the Biological Sciences of The University of Chicago is soliciting nominations and applications for the position of Chair, Department of Health Studies. This newly created department is scheduled to begin operation in the fall of 1994. The Department's mission is to broaden the spectrum of health care issues addressed by the Division's research, curricular, and community activities. With a faculty of biostatisticians, epidemiologists, and health services researchers, the Department will develop its own research and Ph.D. program. In addition, it will provide methodologic and substantive training and support to medical students, residents, interns, fellows, and faculty regarding the relationship between health and the science of medicine through interdisciplinary projects such as medical outcomes studies, development and implementation of guidelines, analysis of clinical decision-making, investigation of patient-provider relationships, and development of health system models that effectively and efficiently address a population's health needs.

The Chair should be an accomplished scientist with a record of notable contributions to health studies research and demonstrated teaching and administrative abilities that will qualify him/her for the rank of Professor. Precise health studies discipline is flexible. The Chair will play a central role in the recruitment of a group of faculty to the Department.

Please address expressions of interest and suggestions, accompanied by resumes and other relevant information to:

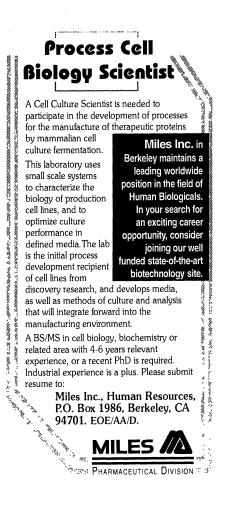
Norman Bradburn, Ph.D. Chair, Search Committee Department of Health Studies 5841 S. Maryland Ave., MC1000 Chicago, IL 60637-1470



An Affirmative Action Equal Opportunity Employer

#### Senior Protein Chemist and Associate/Full Professor University of Illinois at Chicago

Applications are invited for a position as Head of the Protein Sequencing/ Synthesis Laboratory in the UIC Research Resources Center (50%) and tenured Associate/Full Professor in the Department of Biochemistry (50%). We seek faculty who will have a commitment to facilitating university research programs through management of a centralized protein chemistry laboratory and participation in service, training, administrative activities, and demonstrated commitment to equality of opportunity. Applicants are expected to have established expertise and an active, independent and externally funded research program in protein/peptide chemistry. Applicants should send a CV, statement of career interests, summary of current and future research plans and three letters of reference to: Protein Chemist Search Committee, c/o D. Debelak, Search Coordinator, Office of the Vice Chancellor for Research (m/c 672), 310 AOB, 1737 W. Polk Street, University of Illinois at Chicago, Chicago, Illinois 60612. Application deadline: March 31, 1994. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.



# Risk Assessors

#### Senior, Staff & Entry Levels

hemRisk, a division of McLaren/Hart, specializes in conducting human and ecological risk assessments, environmental fate and transport modeling, exposure assessments, toxic tort litigation support, environmental and occupational toxicology, and air quality assessments.

Continued demand for our services has created significant opportunities for individuals who have appropriate education and professional experience in Ecotoxicology, Environmental Toxicology, Fisheries and Wildlife Science, and/or Human Health Sciences. Your responsibilities may include project/staff management, client interaction, report/scientific journal writing, conference presentations, literature search/review, computer modeling, and regulatory agency consultation/ negotiation. Positions are available in our Portland, ME; Warren, NJ; Cleveland, OH; and Alameda and Irvine, CA offices.

Please forward your resume to: H.R. Manager, ChemRisk, Division of McLaren/Hart, 16755 Von Karman, Irvine, CA 92714. Equal Opportunity Employer, M/F/D/V.





#### chemists

A leading Fortune 100 manufacturer of clinical chemistry reagents for the diagnostics market has immediate openings in our South Pasadena facility for clinical professionals with:

- BS/MS in Biochem/Chem
- 3+ yrs. experience in optimization/ improvement of manufacturing processes (dry powder, filling, etc.) <u>OR</u>
- 3+ yrs. product development, product improvement and trouble shooting <u>OR</u>
- 3+ yrs.life science statistical design (preferably diagnostics products) <u>OR</u>
- 3+ yrs. clinical laboratory experience with reagents and instruments, plus statistical skills
- All positions require excellent written/verbal communication and PC skills

At Abbott Laboratories, we provide our employees with a professional environment, opportunity for growth and an outstanding compensation and benefits package. Please forward your resume, (no phone calls please) to Ms. Kaiser. 820 Mission Street • South Pasadena, CA 91030 or FAX (818) 440-0746.

#### **Lecturer** Faculty of Science Division of Botany and Zoology

#### (LEVEL B)

The Division of Botany and Zoology is seeking to fill a tenurable Lectureship in population biology and/or conservation biology. The successful applicant will be involved in developing, organizing and contributing to undergraduate units in ecology and conservation biology, supervision of honours and graduate students, and will be expected to develop a strong

> The Australian National University

independent research program. Preference may be given to applicants who use demographic rather than genetical approaches. Contact: For further information about the position, please contact Professor A Cockburn, telephone (61 6) 249 2866; fax (61 6) 249 5573; Email Andrew.Cockburn@anu.edu.au. Further particulars, which include the selection criteria, are available from the Secretary, telephone (61 6) 249 4566, fax (61 6) 249 0511. Closing date: 31 March 1994. Reference: FS 9.2.1 Salary: Lecturer \$AUS41,000-\$AUS48,688 p.a. Applications addressing the selection criteria should be submitted in duplicate to the Secretary, The Australian National University, Canberra, ACT 0200, Australia, quoting reference number and including curriculum vitae, list of publications and names and addresses of at least three referees The University has a "no smoking" policy in all University buildings and vehicles. The University is an Equal

Opportunity Employer



## Lecturer in Microbiology

Applications are invited for the above position in the Department of Plant and Microbial Sciences. Applicants should have a Ph.D. in microbiology, specialising in bacteriology. Expertise in environmental microbiology, especially biodegradation or food microbiology, would be an advantage. The appointee will be expected to contribute to the teaching of courses in microbiology, biotechnology and cell biology at all undergraduate levels and pursue an active research programme, including the supervision of Honours, M.Sc. and Ph.D. students.

The salary for Lecturers is on a scale from NZ\$40,000 to NZ\$50,000 per annum.

Applications close on 31 March 1994.

Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting Position No. PL94, must be addressed to:

Mr A W Hayward, Registrar, University of Canterbury, Private Bag 4800, Christchurch, New Zealand

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

#### 1994 Prize for Research and Studies of the Repercussions of the Iraqi Invasion of Kuwait

The Kuwait Foundation for the Advancement of Sciences has institutionalized a prize for research and studies of the repercussions of the Iraqi Invasion of Kuwait, to recognize distinguished accomplishments in the Arts, Humanities and Sciences. The Foundation, in establishing this Prize, is fulfilling its objectives in encouraging scientists and researchers to participate in studies of the effects and repercussions of the Iraqi Invasion of Kuwait and its aftermath.

The Prizes awarded annually in the following fields: A. Environmental Research.

- B. Historical Research.
- C. Psychological and Social Research.
- D. Economic Research.
- E. Story and Novel.
- Each Prize consists of a cash sum of K.D. 10,000/-(U.S.\$33.000/-approx.) and a Certificate of Recognition.

The Conditions for awarding the Prize:

- Nominee or researcher should be a qualified and acknowledged as a practitioner in the specific field of the Prize.
- 2. The scientific research submitted must be innovative and distinctive in its ideas, of direct relevance to the State of Kuwait, and must represent a significant contribution to knowledge in the specific field of the Prize.
- 3. The scientific research submitted must be based substantially on original work undertaken and must be published (in the form of books or articles in the recognized scientific literature) during the period subsequent to the Iraqi Invasion of Kuwait.
- 4. The candidate should not have been awarded a prize for the submitted work by any other institution.
- 5. KFAS announces the Prizes and its conditions annually.
- Nominations for these Prizes are accepted from individuals and academic and scientific centers worldwide. No nominations are accepted from political entities.
- The results of KFAS decisions regarding the selection of winners are final and the works submitted for nominations will not be returned regardless of the outcome.
- 8. Nominations with five copies of the scientific research and any inquiry concerning the Prize should be addressed before 31/10/94 to:

The Director General The Kuwait Foundation for the Advancement of Sciences P.O. Box 25263 Safat 13113, Kuwait Tel: +965 2429780/Fax: +965 2415365/ Telex: 44160 KEFAS



The Drug Discovery unit, Pharmaceuticals Division, Novo Nordisk A/S, has an open position for an ambitious scientist in the field of medical molecular biology.

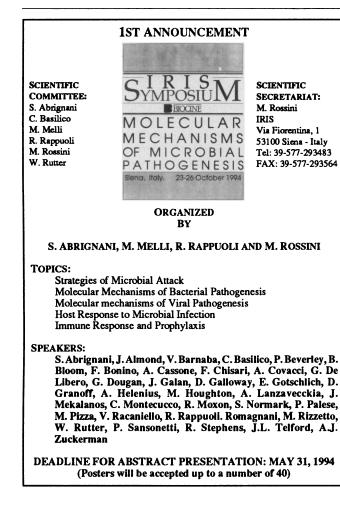
The successful candidate will hold a Ph.D. in Molecular biology and have documented post-doctoral experience in the field of molecular neurobiology or molecular endocrionology. Ability and willingness to contribute to a collaborative and team oriented environment are essential qualities of the person we are looking for.

The Drug Discovery unit is internationally recognized for its pioneer work in the areas of amino acid and dopamine neurotransmission. Current efforts are directed towards development of novel therapeutic approaches in the treatment of epilepsy, neurodegenerative diseases, schizophrenia, and osteoporosis.

For further information, please contact Tage Honoré, phone + 45 4442 4545. Written application marked "Biologist 1031" and names of three references, and details of previous research experience should be sent to Human Resources HCG. Novo Nordisk

Novo Nordisk is one of the world's leading biotechnology companies. It is a major force in insulin manufacture and diabetes treatment and is the world's largest producer of industrial enzymes. The company also manufactures and markets a variety of other pharmaceuticals and bioindustrial products. Headquartered in Denmark, Novo Nordisk employs more than 11,500 people in 47 countries.

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark



American Friends of the William Harvey Research Institute A Not-For-Profit Organization

Present a conference on

#### ENDOTHELIAL CELLS AND THEIR ENZYMES AS TARGETS FOR NEW DRUGS

Thursday 21st - Friday 22nd April 1994 to be held at the

Sheraton Society Hill Hotel, Philadelphia, USA

Chaired by: Sir John Vane FRS and Professor Gustav Born FRS

Faculty: E Änggård, R Corder, P Cuatrecasas, A Edelson, R Flower, A Ford-Hutchinson, L Ignarro, I MacIntyre, T Masaki, J Polak, C Schwartz, T Springer, D Steinberg, C Thiemermann, D Tomlinson, P Vanhoutte, T Warner, D Willoughby, K Ku, M Yanagsisawa

For further information:-Dr Jenny Maclagan, William Harvey Research Conferences, The Medical College, Charterhouse Square, London EC1M 6BQ, UK tel +44 71-982-6181; FAX +44 71-982-6084

#### NATIONAL HELLENIC **RESEARCH FOUNDATION**

The National Hellenic Research Foundation invites applications for the position of its General Director.

Candidates should have a Curriculum Vitae corresponding to a full Professor with extensive experience in the field(s) corresponding to one of its six institutes. Contracts are of three years duration, subject to three years renewal. Submission of applications, a C.V. with publications (5 copies) and detailed information:

Ministry of Industry, Research & Technology General Secretariat for Research & Technology **Technological Development & Supervision of Research Institute & Directorate** 14-18 Mesogion Ave. Athens 115 10

Tel (01) 6911-122 Fax (01) 7715074

#### Closing date: 30 April 1994

## Globai CHANC

The Royal Swedish Academy of Sciences Secretariat for the International Geosphere-Biosphere Programme

#### **Programme Officer: Social Sciences**

On behalf of the International Geosphere-Biosphere Programme (IGBP), and the Human Dimensions of Global Environment Change Programme (HDP), the Royal Swedish Academy of Sciences invites applications for the position of Programme Officer at the IGBP Secretariate for joint IGBP/HDP activities. The IGBP is an international research programme, dealing with the causes and effects of global environment change. The HDP is a companion programme concerned with the human activities that contribute to global environment change, the consequences of global environment change for human beings, and the ways in which human behavior may be influenced to mitigate global change and adapt to it.

The Programme Officer will be responsible for

- liaison between the HDP and the IGBP, and the emerging European Network for Research in Global Change (ENRICH) and relevant research activities of the European Commission,
- serving as staff officer for joint HDP-IGBP working groups or Core Projects, such as Land Use and Cover Changes (LUCC),
- human dimensions aspects of global change in IGBP Core Projects,
- assisting HDP and IGBP in ensuring that the human dimensions of the . accepted and proposed Core Projects are adequately treated,
- encouraging interdisciplinary research on global change

The successful candidate will

- have a Ph.D. in a relevant field of social sciences.
- have proven interest in research on human impacts of global environmental change, and an ability and interest in fostering the interacting between researchers in the natural and social sciences,
- be well acquainted with international scientific collaboration, including organisational and policy aspects,
- possess complete command of both written and spoken English; knowledge of other languages is an advantage.

The Programme Officer will be based at the IGBP Secretariat in Stockholm, Sweden. The contract period is two years, with the possibility of an extension. The salary is paid is Swedish Crowns and depending on qualifications, is based on that of a senior scientist in Sweden.

Letters of applications describing past relevant experience, with a curriculum vitae and the names of three referees, should be sent no later than 15 April 1994 to the IGBP Secretariat, The Royal Swedish Academy of Sciences, Box 50005, S-10405 Stockholm, Sweden; fax +46 8 166405, tel +46 8 166448.

Dr. Reddy's Research Foundation, promoted by the well-known Dr. Reddy's Group of Companies, Hyderabad, India, has been recognised as a Scientific & Industrial Research Organisation (SIRO) by the Dept. of Scientific & Industrial Research, Ministry of Science

& Technology, Govt. of India. The Foundation has established a state-of-the-art research facility at Miyapur, 20 km north-west of Hyderabad City, devoted to both basic and applied research in pharmaceuticals.

The Foundation invites highly motivated scientists to join in its R&D endeavours. The focus of research is discovery and development of new molecules as novel therapeutic agents.

#### GROUP LEADERS

Ph.D. scientists aged between 35 and 40 years. 8-10 years' research experience, preferably in industry.

Medicinal Chemistry (Code: GL-MC) Medicinal Chemist. Extensive experience in organic synthesis. Familiarity with rational approaches to drug discovery including drug design and QSAR. Drug Design (Code: GL-DD)

Drug design specialist. Thorough with medicinal chemistry. Intimate with computeraided molecular design, molecular connectivity and bio activity prediction based on QSAR and allied recent techniques.

Pharmacology (Code: GL-PG) An expert at screening new molecules for bio-activity, preferably using modern approaches such as enzyme inhibitor/receptor binding screens. Experience in pharmacokinetics desirable

netics desirable. **Biochemistry** (Code: GL-BC) Biochemistry (Code: GL-BC) Biochemistry (Code: GL-BC) Biochemistry (Code: GL-AC) Adept in all branches of analytical chemistry with special reference to sophisticated instrumental methods of analysis such as NMR, GC-MS, FT-IR, UV-VIS and chromato-graphic techniques. Microbiology (Code: GL-MB) Microbiologist/Biotechnologist. Thorough experience in microbial strain improvement, genetic manipulations, cultural preservation and fermentation process development.

genetic manipulations, cultural preservation and fermentation process development. The fruits of challenge

As a DRF employee, incumbents would enjoy a stimulating team environment, a fertile R&D ambience, an excellent consideration package and an opportunity for professional advancement.

For immediate consideration, forward complete resume in strict confidence, specifying position of interest (Code) and salary structure, within twenty days, to:

> President Dr. Reddy's Research Foundation 7-1-27 Amerpet Hyderabad - 500 016 INDIA

Kindly superscribe the envelope with the relevant Code No. Dr. Reddy's is an equal opportunity employer

#### Max Planck Institute of Psychiatry

- Clinical Institute -

#### Molecular Neuroendocrinology

Applicants are invited for a position as Leader of a research group interested in hormone-regulated gene expression at the cellular and systemic level. Expertise in molecular pharmacology or corticosteroid receptors and development of transgenic mice is desired.

The candidate must have a commitment to integrate his group into an interdisciplinary research function. The appointment will be for five years, starting spring 1994; the salary is commensurate with experience and training.

Please send CV, list of publications, summary of research experience and arrange for three letters of reference to be sent to:

Personnel Management, Max Planck Institute of Psychiatry, Clinical In-D-80804 Munich, stitute, Kraepelinstr. 16, Germany Code word: "Professor Dr. Dr. Florian

Holsboer, Director of the Max Planck Institute of Psychiatry, Clinical Institute".

# **Science** is working in Europe...

with an entire team committed to European growth

#### EDITORIAL

Manuscripts: Richard Gallagher, News: Daniel Clery

- Expert manuscript handling by European editors
- In-depth analysis of the latest scientific stories by our dynamic news team
- Including informed comment on the most vital research occurring in Europe

## MARKETING

Contact: Jane Pennington

- Working to increase circulation in Europe
  - Making subscription easy
- Providing a complete subscription service for Europe

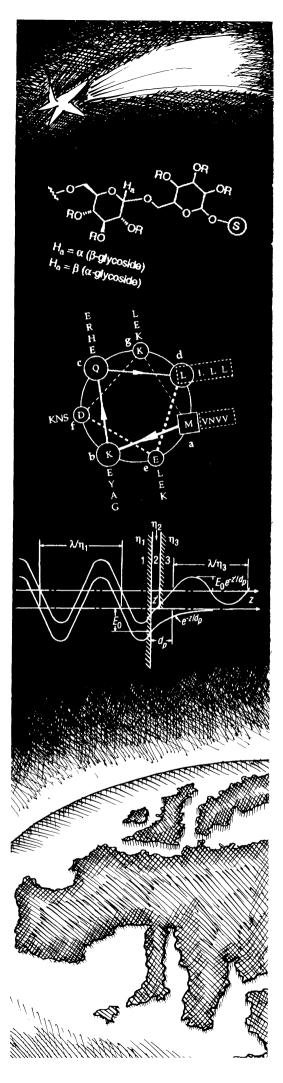
## ADVERTISING

Classified: Annemarie Vis Display: Andrew Davies tel: 0457 838519 Tracey Peers tel: 0270 760108

- Giving the readers the best product information
- Offering a comprehensive selection of international jobs and events
  - Ensuring the essential direct link between European advertisers and Science

# Authors, Subscribers and Advertisers can contact the European team at the:

Science Europe Office, Thomas House, 14 George IV Street, Cambridge CB2 1HH UK Tel: (44) 223 302067, Fax: (44) 223 302068



#### ASSISTANT PROFESSOR Department of Oceanography University of British Columbia

The Department of Oceanography of the Faculty of Science invites applications for a tenure-track position in biological oceanography at the Assistant Professor level. Appointment may be considered at a higher rank for a candidate with exceptional qualifications. We will consider applicants in any area of biological oceanography, but we are especially interested in marine microbial ecology, the application of molecular techniques to biological oceanography, marine zooplankton ecology and applicants with an interest in interdisciplinary research. The successful candidate will hold a minor cross appointment in an appropriate Life Science Department, will have the opportunity to develop a strong research program, work with graduate students and teach at the graduate and undergraduate level. UBC welcomes all qualified applicants, especially women, aboriginal people, visible minoritiles, and persons with disabilities. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Subject to final budgetary approval the position is available from 1 July, 1994. The competition will remain open until the position is filled; screening of the applications will begin 15 April, 1994.

Applications including a resume, a statement of research interests and the names of three referees (with fax and/or telephone numbers, if possible) should be sent to:



Dr. S. Pond Department of Oceanography University of British Columbia Vancouver, B.C. CANADA V6T 1Z4 Fax: (604) 822-6091 Tel: (604) 822-5940

#### NATIONAL HELLENIC RESEARCH FOUNDATION

The National Hellenic Research Foundation invites applications for the positions of Directors of its following six institutes:

- Theoretical and Physical Chemistry
- Biological Research and Biotechnology
- Organic and Pharmaceutical Chemistry
- Centre of Byzantine Research
- Centre for Neohellenic Research
- Research Centre for Greek and Roman
   Antiquite

Candidates should be scientists with a Curriculum Vitae corresponding to a full Professor. Contracts are of five years duration, subject to five years renewal.

Submission of applications, <u>a C.V. with publica-</u> tions (5 copies) and detailed information:

Secretariat NHRF 48, Vas. Constantinou Ave. Athens 116 35 Greece Tel (01) 7224-969 Fax (01) 7246618

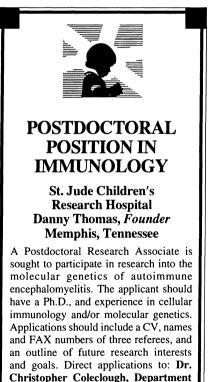
Closing date: 30 April 1994

#### Hall Family Foundation Distinguished Professorship in Molecular Medicine

The University of Kansas Medical Center seeks to recruit a distinguished physician/scientist with national and international reputation and achievements in molecular medicine. The professorship is established in partnership with the Hall Family Foundation which will endow the salary and expenses of the successful candidate. We seek an internationally recognized physician/scientist with a clear history of productive, innovative, and progressive clinical and research achievement in the field of molecular medicine. The successful candidate will establish a basic science and clinical program in molecular medicine at the University of Kansas School of Medicine. The individual will be allocated research space in a new research building slated for completion in Summer, 1994. The incumbent will have interactions with 350 full-time faculty members at the University of Kansas School of Medicine who have extensive research centers in cancer, aging, neurosciences, environmental health, mental retardation and reproductive biology. The environment will provide the candidate with rich opportunities for clinical applications of molecular medicine and continuation of basic research in molecular biology. This appointment will be at the full professor level with tenure in either a clinical or basic science department. Applications from interested individuals or nominations of suit able individuals are invited. Please contact: Daniel Hollander, M.D., Executive Dean, School of Medicine, University of Kansas Medical Center, Kansas City, KS 66160-7300. The University of Kansas is an Equal Opportunity/Affirmative Action employer.

#### Center for Recombinant Gamete Contraceptive Vaccinogens

Postdoctoral research positions are available for qualified individuals to receive training in various aspects of contraceptive vaccine development within the context of a multi-institutional, multidisciplinary NIH-sponsored center. Training is possible with one or several of the following investigators at participating universities: 1) Dr. Roy Curtiss, Washington University. Recombinant avirulent Salmonella vaccines and reproductive tract immune response analysis; 2) Dr. Erwin Goldberg, Northwestern University. Identification and cloning by immunologic and recombinant DNA technologies of cognate antigens responsible for human infertility; molecular biology of spermatogenesis; 3) Dr. Michael O'Rand, Univer-sity of North Carolina. Molecular biology of sperm and testis proteins which are involved in gamete recognition, zona pellucida binding and penetration, including both sperm lectins and enzymes; 4) Dr. Kenneth Tung, University of Virginia. Mechanisms of regu-lation and pathogenesis of autoimmune diseases of the ovary and experimental design of reversible contraceptive vaccine based on ovarian antigens; 5) Dr. John Herr, University of Virginia. Molecular biology of spermatogenesis; contraceptive vaccine development; 6) Dr. Charles Flickinger, University of Virginia. Cell biology of the male reproductive tract; effects of vasectomy. Candidates should have a Ph.D. or M.D. degree and a strong record of publications involving any or several approaches: immunology, vaccinol-ogy, recombinant DNA, protein expression, monoclonal antibody-antigen characterization, secretory immunity or reproductive biology. Send curriculum vitae and names of three references to: Ms. J.M. ("Mollie") Kitchen, Center for Recombinant Ga-mete Contraceptive Vaccinogens, Department of Anatomy and Cell Biology, University of Virginia Health Sciences Center, Box 439, Charlottesville, VA 22908. Specify investigator and institution of preference for postdoctoral training. The universities involved in this center are equal opportunity/ affirmative action employers.



Christopher Coleciough, Department of Immunology, St. Jude Children's Research Hospital, 332 No. Lauderdale, Memphis, TN 38105. An affirmative action/equal opportunity employer. We provide a smoke-free environment.

#### THE ROCKEFELLER UNIVERSITY

#### **CLINICAL SCHOLARS**

The Clinical Research Center at The Rockefeller University is seeking M.D. or M.D./Ph.D.'s who wish to develop a commitment to patient-oriented research. The opportunity will be provided to work in one of 10 major laboratories now actively using the Hospital. Clinical Scholars will participate in current clinical research, develop independent clinical programs and acquire laboratory skills to enable development as independent investigators. The Hospital provides an unequalled opportunity for intensive clinical investigation, devoid of any clinical responsibilities other than those required for research subjects. Applications are now being considered from licensed physicians for appointments as early as July of this year from the postdoctoral through junior faculty levels.

Please send curriculum vitae and a letter describing clinical investigative interests to:



Jules Hirsch, M.D. Physician-in-Chief Rockefeller University Hospital 1230 York Avenue (Box 310) New York, New York 10021-6399

The Rockefeller University is an equal opportunity employer and has an affirmative action program to increase the employment of women and members of protected groups at all job levels.

THE ROCKEFELLER UNIVERSITY

#### DIRECTOR CENTER FOR ENERGY AND ENVIRONMENTAL EDUCATION

The University of Northern Iowa (UNI) invites nominations and applications for the position of Director of its Center for Energy and Environmental Education (CEEE). The mission of the Center is to educate the public about environmental and energy issues throughout the biosphere. The Center is housed in a new, state-of-the-art building designed to accommodate and showcase multidisciplinary educational programs. The Director will be a visionary leader who is the chief administrative officer of the Center and reports to the Dean of the College of Natural Sciences (CNS). Applicants should hold an earned doctorate degree in a discipline related to the mission of the CEEE and qualify for a tenured or tenure track appointment in CNS. The candidate should have administrative experience managing multidisciplinary programs in an academic institution or public or private organization; success in obtaining grants; and a substantial record of publications. The directorship is a 9-month academic appointment. Internal support for summer salary will be provided for the first two years. Salary is commensurate with experience and gualifications. UNI values and is committed to environmental science and education programs. In addition to the CEEE, the university has established graduate and undergraduate environmental programs as well as research. and educational initiatives related to environmental and energy issues. UNI is one of three Regent's Universities in Iowa and is located in the metropolitan area of Cedar Falls/Waterloo (pop. 110,000). Nominations should be as detailed as possible; applications must include a current resume, names and addresses of at least three references, and a statement of the applicants' special qualifications for, and interest in the position. Nominations and applications should be sent to: Ed Brown, Search Chair, Environmental Programs, 50 BRC The University of Northern Iowa, Cedar Falls, IA 50614-0181. The review of applications will begin April 15, 1994 and applications will be received until the position is filled. UNI encouraged applications from minority persons, women, disabled persons and Vietnam era veterans. UNI IS AN EQUAL OPPORTUNITY EDUCATOR AND EMPLOYER WITH A COMPREHENSIVE PLAN FOR AFFIRMATIVE ACTION.

#### A SCIENCE SPECIAL ADVERTISING SECTION

## Biotechnology and Pharmaceutical Industry: EAST COAST RESEARCH EXPLOSION! Issue date: April 1, 1994

Only SCIENCE is there to give readers an inside look at the rapid expansion of new biotechnology and pharmaceutical research. SCIENCE takes readers inside top US East Coast companies in Cambridge, Massachusetts; New Jersey; Long Island, New York; Maryland and the Research Triangle in North Carolina.

If you want to reach the leading scientific talent with your recruitment advertisements, you'll need to place a full-page ad in this exciting special advertising section of SCIENCE.

#### You Get More in SCIENCE.

Here's what you get when you place your full-page advertisement in the East Coast Biotechnology and Pharmaceutical Special Advertising Section:

#### • Bonus distribution

Biotechnology & Pharmaceutical Job Fairs:

- □ April 22-23, Cambridge, Massachusetts
- May 13-14, Chevy Chase, Maryland

PLUS, unbeatable bonus distribution to these hot scientific meetings:

 April 10-13, American Association for Cancer Research, San Francisco, California
 April 24-28, Experimental Biology (FASEB), Anaheim, California

• Priority placement within the editorial section.

**Reserve Your Space Today!** 

In the US and Canada: Call Janis Crowley at (212) 496-7704, or fax: (202) 682-0816.

In Europe: Call Annemarie Vis at (+44) 0223 302067, or fax: (+44) 0223 302068.

In Australia: Call Keith Sandell at (+61) 02922 2977, or fax: (+61) 02922 1100

Advertising Space Reservation Deadline: March 15, 1994.



#### BIOLOGY DEPARTMENT HIRAM COLLEGE

Hiram College, an independent liberal arts institution located in the Western Reserve of Northern Ohio, invites nominations and applications of the following positions in the Biology Department:

#### **BIOLOGIST/BIO-ETHICIST**

This position is classified as a one-year, non-tenure track sabbatical replacement. This person will normally teach courses in Biology for the Non-Major, Introductory Botany (usually team-taught), and possibly Molecular/Cellular Biology. In addition to the 4 courses to be offered in the department, the individual will be expected to teach 2 courses dealing with some aspect of Bioethics. These two courses will be open to all students. The successful candidate will have a Ph.D. in the life sciences and a strong commitment to teaching at the undergraduate level.

#### ANIMAL PHYSIOLOGIST/ VERTEBRATE BIOLOGIST

This position is a non-tenure track position in Animal Physiology and Vertebrate Biology. The successful candidate should have a commitment to teaching at the undergraduate level and to involving undergraduates in research.

Interested parties should submit a curriculum vitae, statement of philosophy on teaching and research, and three letters of reference by March 11, 1994 to Dr. Matthew H. Hils, Biology Department, Hiram College, Hiram, OH 44234. Candidates may also E-Mail Laughnerwj@Hiram.Edu.

Hiram College is an Equal Opportunity Employer. Women, minorities and persons with disabilities are encouraged to apply.

#### UNIVERSITY OF THE WEST INDIES CAVE HILL CAMPUS

**PROFESSORSHIP/SENIOR LECTURER IN TROPICAL** HORTICULTURE, W.I., & DIRECTOR OF ANDROM-EDA BOTANICAL GARDENS, BARBADOS. Applications are invited for the above joint post at the Cave Hill Campus of the University the West Indies, Barbados. The post has been established in the Department of Biology of the Faculty of Natural Sciences at the Cave Hill Campus, through the generosity of the Peter Moores Foundation, and applicants should have both the ability to organize practical and academic training in tropical ornamental horticulture as well as the practical horticultural skills necessary for the management of a Tropical Botanic Garden. The successful candidate will also be expected to develop relevant research programmes in collaboration with the Department of Biology (Barbados) and the Faculty of Agriculture (Trinidad). Salary: Professor in the range BDS\$88,332-108,684 per annum. Senior Lecturer: BDS\$60,216 x 1956-71,952 x 2112-78,288 (Bar) x 2122 - 82,512. Up to five full economy class passages plus baggage allowance of US\$1,800 on appointment and normal termination. Special allowance up to US\$600 for shipment of academic books and teaching/research equipment on appointment. Unfurnished accommodation at 10% of basic salary or optional housing allowance of 20% of basic salary to staff making own housing arrangements. UWI contribution of equivalent of 10% Superannuation Scheme. Annual Study and Travel Grant for self, spouse and up to three children. Book Grant up to BDS\$935 per annum. Detailed applications (three copies) giving full particulars of qualifications and experience, date of birth, marital status and addresses of three (3) referees should be sent as soon as possible to the Campus Registrar, University of the West Indies, P.O. Box 64, Bridgetown, Barbados. The University will send further particulars for this post to all applicants.

#### FACULTY POSITION ASSOCIATE RESEARCHER

R4, Position No. 86076, School of Ocean, Earth Science and Technology, Hawaii Natural Energy Institute, full-time, extramural funds, to begin approxi-mately May 1994. DUTIES: Performs research and manages research programs in energy conversion and utilization, and pollutant control. Specific topics include thermochemical conversion of biomass and other renewable feedstocks into transportation, fuels, electricity, and coproducts, and optimi-zation of such processes; utilization of ocean thermal gradient for electricity and coproduct generation; control of pollutants from chemically-reacting systems; and global-warming mitigation strategies. Oversees design, pro-curement, and construction of pilot research facilities. Coordinates and performs experiments and theoretical analyses of advanced thermodynamic systems, transport phenomena, and chemical reactions. Participates in field testing and evaluation of prototype energy-conversion and emissions-control technologies. Instructs courses in thermodynamics, transport phenomena, and energy conversion; prepares research proposals for external funding; develops budgets and expenditure plans; and writes reports and journal publications. Supervises other research team members and graduate students as needed. Performs other research, instructional and professional-service tasks as required. MINIMUM QUALIFICATIONS: Ph.D. from an accredited college or university in mechanical engineering with emphasis on thermosciences, chemically-reacting systems, and fluid mechanics; formal graduate-level university training in those areas. Eight years of university or industrial experience conducting basic or applied research on energy conversion, pollutant control, and global warming mitigation strategies, focusing on sion, political control, and global warming integration strategies, toolsing on multi-phase systems, culminating in project reports or peer-reviewed publica-tions. Proven experience with federal funding agencies, generation of research proposals and management of research projects and teams. Teaching experience in thermoscience at the university level. Ability to plan and direct work for technical staff; good oral and written communication skills. Proven experience in design, fabrication and management of laboratory-scale experimental facilities; in development of optical and probe diagnostics and test electronics for experiments involving flow and chemical-reactions; and in modelling thermodynamic systems. Familiarity with industrial power-genera-Indocenting thermodynamic systems: Parlinarity with moustrial power-generation equipment and pollutant-control devices; extensive interaction with industry. <u>MINIMUM MONTHLY SALARY:</u> \$5,622.00 per month. <u>APPLICATION REQUIREMENTS:</u> Send or fax (808) 956-2336): statement of research interest, curriculum vitae and three (3) letters of recommendations from work related references to Personnel Officer, Hawaii Natural Energy Institute, 2540 Dole Street, Holmes Hall 246, Honolulu, Hawaii 96822. INQUIRIES: Dr. Chardes (1902) 562-2326. Charles Kinoshita, (808) 956-2343. Closing Date: March 28, 1994

The University of Hawaii is an Equal Opportunity/Affirmative Action Institution and encourages women, minorities, disabled and veterans to apply.

#### Pre- and Post-doctoral Opportunities

#### TRAINING PROGRAM IN NEUROSCIENCE AT

#### MEHARRY MEDICAL COLLEGE

The Department of Physiology, Meharry Medical College in Nashville, Tennessee, has training opportunities available immediately through a National Institute of Mental Health funded training program in Neuroscience. The program focuses on the role of neurostransmitters and signal transduction mechanisms in mental health.

The Faculty Mohit L. Bhattacharyya, Ph.D.	Research Interest Electrophysiology of cellular Ca** homeostasis		
John T. Clark, Ph.D.	Behavioral neuro-endocrinology and hypertension		
Steven M. Fredman, Ph.D.	Regulation of synaptic transmission		
Robert T. Matthews, Ph.D.	Electircal properties of nucleus basalis neurons		
Sukhbir S. Mokha, Ph.D.	Opioid modulation of trigeminal pain mechanisms		
Hubert K. Rucker, Ph.D.	Plasticity of sensory processing in neocortex		
Linda D. Sander, Ph.D.	Brain-gut peptides and pituitary-adrenal function		
James G. Townsel, Ph.D.	Cholinergic synaptic neurochemistry		

Postdoctoral applicants should respond by sending a letter outlining research interests and career goals accompanied by a curriculum vitae. Individuals seeking admission to the pre-doctoral program should request an application package using the address below.

Funding is restricted to U.S. Citizens and permanent residents. Women and members of underrepresented minority groups are especially encouraged to apply.

For further information, contact: Dr. James G. Townsel or Dr. Hubert K, Rucker ATTN: Neuroscience Training Program Department of Physiology Meharry Medical College Nashville, TN 37208

Phone: 615-327-6288 Fax: 615-327-6655

#### President Boyce Thompson Institute at Cornell University

Applications and nominations are invited for the position of President of Boyce Thompson Institute for Plant Research at Cornell University. Boyce Thompson Institute (BTI) is a nonprofit, independent, privately endowed corporation conducting research on plants and associated organisms. The Institute is a modern facility located on the campus of Cornell University and is affiliated with the College of Agriculture and Life Sciences. BTI has an annual budget of \$8 to \$9 million and employs approximately 145 scientists and support staff, 70 at the Ph.D. level.

The President serves as chief executive officer and is responsible for formulation of Institute policy, evaluation of productivity of research programs, selection of scientific personnel, acquisition of financial support, overall operation of the Institute, interaction with Cornell University administration, and development and promotion of external relations. The President reports to the BTI Board of Directors.

Selection will be based upon experience, consistent with the goals of the Institute which span basic and applied research. Demonstrated scientific leadership, proven administrative ability, and success in recruiting research support and/or fund-raising are essential. Applicants should send curriculum vitae, bibliography and names of five professional people acquainted with the applicants background to: Norman R. Scott, Vice President for Research and Advanced Studies, Chair of Search Committee, Cornell University, 314 Day Hall, Ithaca, NY 14853. Nominations should also be sent to Dr. Scott. All applications and nominations should be submitted as soon as possible. The Search Committee will begin reviewing applications June 1, 1994. Target starting date by July 1, 1995 to September 1, 1995. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

## A COLORAD

TargeTech. Inc. (a wholly owned subsidiary of the Immune Response Corp. of Carlsbad, CA) is a research stage biopharmaceutical company pursuing a novel technology of receptor-mediated delivery of DNA for the treatment of diseases by antisense oligonucleotide or gene therapy.

#### **BS/MS Molecular Biologist**

This is an exceptional opportunity for a highly motivated individual who desires to be an integral member of a multidisciplinary team developing gene therapies in an entrepreneurial environment.

The applicant should have proven skills in restriction analysis, DNA cloning, electrophoresis techniques, gene expression analysis, and other areas of molecular biology.

TargeTech, Inc. is committed to providing a nurturing environment for creative, highly motivated scientists by offering competitive salaries, a comprehensive benefits package, and equity participation in the company. Submit resume to: **Human Resources**, **TargeTech, Inc., 290 Pratt St., Meriden, CT 06450.** We are an equal opportunity employer.

TARGETECH INC.

#### TAMPA BAY RESEARCH INSTITUTE LABORATORY DIRECTOR/PROFESSOR

Tampa Bay Research Institute of St. Petersburg, Florida, and Salem-Teikyo University of Salem, West Virginia, announce the development of a joint Graduate Program in Molecular Biology/ Biotechnology. Currently, several senior positions as :Laboratory Directors and at the Associate or Professor levels are considered.

The focus of the research will be in the study of human virus latency with emphasis using the molecular biological approach and antiviral therapy. Other areas of research interest include a signal transduction and oncogenes. Special consideration is being extended to those candidates with strong Transgenic Animal research interest. Tampa Bay Research Institute and Salem-Teikyo University are in the process of developing a modern Transgenic Animal research laboratory.

Salem-Teikyo University, is in the process of establishing a Graduate Program in the field of Molecular Biology/Biotechnology, subject to approval of the North Central Associatiation. Incumbents must have demonstrated communication skills and ability to teach at the graduate level.

Successful candidates will have their research programs located in Florida and may teach one courses per year at Salem-Teikyo University. Joint appointments at the Tampa Bay Research Institute are expected for successful candidates.

Tampa Bay Research Institute is based in a modern facility with excellent individual laboratory and office space, and centralized facilities includes a Biotechnology Service laboratory, transgenic mice and in-house DNA sequence database.

Investigators will enjoy complete freedom to pursue their research goals, While junior candidates will be considered, individuals with ongoing, active programs are encouraged to apply.

Applicants should have a Ph.D. or equivalent. Interested individuals should send curriculum vitae, list of publications, a short statement of research achievements, and names and addresses of three referees to the Chairman, Search Committee, Tampa Bay Research Ins 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.

The Herman B Wells Center for Pediatric Research at the Indiana University School of Medicine has postdoctoral positions available immediately. Major research programs focus on hematopoiesis, molecular endocrinology, cancer biology, gene therapy, and myeloid cell biology. The faculty include:

Wade Clapp, M.D. Fetal liver hematopoiesis; hematopoietic stem cell ontogeny; gene therapy.

Mary Dinauer, M.D., Ph.D. Biology of neutrophil function, inflammation, superoxide formation; gene replacement therapy for inherited white cell disorders.

Claire Doerschuk, M.D. Study of lung inflammatory processes; adhesion and migration of leukocytes; effector functions of leukocytes at the inflammatory site. David Emanuel, M.D. Gene transfer; immunotherapy of viral infections. Randy Hock, M.D., Ph.D. Retroviral transfer of immunopotentiating genes into

tumor cells to enhance host anti-tumor responses.

Mark R.-Kelley, Ph.D. Molecular neuroimmuno-endocrinology; DNA repair; analysis of human triplet repeat disease genes. Wei-Hua Lee, Ph.D., M.D. Developmental neuroendocrinology; role of insulin-

Wei-Hua Lee, Ph.D., M.D. Developmental neuroendocrinology; role of insulinlike growth factor l in brain development and injury.

**Ora Hirsch Pescovitz, M.D.** Hormonal and molecular mechanisms in fetal growth and reproduction; placenta and testis growth hormone releasing hormone.

Scott Rivkees, M.D. Molecular neurobiology of circadian pacemakers in brain; neural sites and mechanisms of adenosine action via G protein-coupled receptors. Kent Robertson, M.D., Ph.D. Role of retinoic acid receptors in myeloid and neuroblastoma cell differentiation.

David Skalnik, Ph.D. Regulation of tissue-specific gene expression in myeloid cells; cloning of transcription factors; transgenic animal tumor models. Carolyn Srivastava, Ph.D. Regulation of gene expression during spermatogen-

esis; mutations affecting testicular development and function. Terry Vik, M.D. Regulation of protein kinases involved in hematopoietic

growth factor signal transduction.

David Williams, M.D. Hematopoietic stem cell biology; gene transfer technology.

**Mervin Yoder, M.D.** Molecular regulation of murine embryonic yolk sac hematopoietic stem cell proliferation and differentiation.

Interested candidates should send a curriculum vitae, a brief description of research interests, an indication of which faculty member(s) are of interest, and the names of three references to Dr. David Williams, Herman B Wells Center for Pediatric Research, Room 2600, Riley Hospital for Children, 702 Barnhill Dr., Indianapolis, IN 46202-5225.

## Tenure-Track And Postdoctoral Opportunities.

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

#### 

Tenure-track position is available for candidate to develop an independent research program in the area of hypertension. Research support will include up to two postdoctoral fellows and technicians for up to six years. MD degree, board eligibility in Internal Medicine, and a minimum of three to four years postdoctoral training and experience in molecular biology and biochemistry are required. Hypertension-Endocrine Branch (OE-42), NHLBI, Building 10, Room 8C103.

#### ---- Postdoctoral Positions -----Antigen Processing and Presentation Paul A. Roche, PhD

The molecular mechanisms regulating the processing of foreign antigens into peptides and their presentation to T lymphocytes are being studied using both wild-type and mutant antigen presenting cells. Current projects focus on accessory molecules involved in MHC glycoprotein transport and the characterization of the intracellular compartments involved in MHC glycoprotein-peptide binding. Experience in biochemistry, immunology, or cell biology is desirable. Experimental Immunology Branch (OE-42), NCI, Building 10, Room 4B17.

#### Endocrinology and Molecular Biology James H. Segars, MD

The regulation of estrogen responsive genes involved in reproduction is being investigated using a variety of molecular biologic approaches. Present studies focus upon the role of the retinoid X receptor in estrogen responsive gene function. Future studies will seek to isolate specific factors contributing to estrogen responsive gene regulation. Applicants must have less than five years postdoctoral experience. Laboratory on the Molecular Mechanisms of Reproduction (OE-42), NICHD, Building 10, Room 10N262.

#### Molecular Mechanisms of DNA Repair, DNA Replication, and Toxin Action Eric J. Ackerman, PhD

The molecular biology of vertebrate DNA repair is being investigated with particular emphasis on the role of singlestranded to double-stranded replication. Repair of damaged DNA substrates is studied both in injected *Xenopus* oocytes and efficient extracts. Additional projects involve elucidating the molecular mechanisms by which toxins disrupt cellular protein synthesis. Applicants must have less than five years postdoctoral experience. Office of the Director (OE-42), Division of Intramural Research, NIDDK, Building 5, Room 411.

#### RNA Polymerase II Mark A. Mortin, PhD

The structure and function of RNA polymerase II and related transcription factors are studied using a multidisciplinary approach including suppressor/enhancer genetics, molecular genetics, biochemistry, and molecular modeling. Applicants should have less than five years postdoctoral experience. Laboratory of Biochemistry (OE-42), NCI, Building 37, Room 4C19.

#### Transgenic Models Jeffrey E. Green, MD

A biotechnology fellowship is available to provide training in applying basic molecular biology techniques to critical problems in clinical oncology. Transgenic models of prostate and breast cancers are being developed and studies are also focused on hormone response elements. Candidate must be a US Citizen or permanent resident. Laboratory of Molecular Oncology (OE-42), NCI-FCRDC, P.O. Box B, Building 469, Room 237, Frederick, MD 21702-1201.

#### Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (tn3270.cu.nih.gov) or via modem (1,3014022221 or 1,8003582221). The settings for modem access are "7,Even,1". When connected to NIH, type in ",vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

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

#### To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/ PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed

with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



## National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892 Equal Opportunity Employer

#### DEPARTMENT OF OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE SCIENCES UNIVERSITY OF PITTSBURGH ASSOCIATE PROFESSOR/PROFESSOR

The Department of Human Genetics, Graduate School of Public Health, and the Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medi-cine, are recruiting an Associate Professor/Professor with a research focus in developmental genetics or the molecular basis of cancer. Successful candidate will be a member of the newly created Magee-Womens Research Institute. Salary and rank will be commensurate with qualifications. The proposed start date is July 1, 1994. Applicants should send curriculum vitae by April 1994 to:

W. Allen Hogge, M.D. Department of Obstetrics, Gynecology and Reproductive Science University of Pittsburgh School of Medicine Magee-Womens Hospital 300 Halket Street Pittsburgh, PA 15213-3180

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

CHAIR Department of Microbiology

Medical College of Ohio at Toledo (MCO)

Nominations and applications are requested for a microbiologist/immunologist to fill the position of Professor and Chair of the Department of Microbiology. An applicant should have a record of accomplishments in research, education and administration. The Chair will be responsible for overall direction of a growing department that currently includes eight full-time faculty members and nineteen doctoral students. The Department of Microbiology has an active research program in the areas of bacterial genetics, immunology, mycology, and virology. The teaching responsibilities of the Department include the Ph.D. program and the education programs of medical and nursing students. The new Chair will have the opportunity to recruit additionat tenue-track faculty members. Applications will be re-viewed beginning February 1, 1994, and continuing until the position is filled. Please submit a letter outlining your research and administrative goals and curriculum vitae to: Professor Louis Weinstein, Chair, Microbiology Search Committee, c/o Dean's Office, Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699–0008. MCO is an Affirmative Action/M/D/D/V/Employer.

#### **RESEARCH DIRECTOR/** ADMINISTRATOR

National Disease Research Interchange (NDRI) has a full-time position for a Research Director, Administrator to coordinate a research resource prorearministrator to coordinate a research resource pro-gram of this non-profit organization. Requirements are: a Ph.D. in biological sciences, experience in writing proposals, familiarity with NIH and its pro-cedures, excellent organizational and administrative skills and computer knowledge. Ability to be a team player and high level of enthusiasm for organization-al copertions and development are critical. al operations and development are critical. Send curriculum vitae to: Project Director, NDRI, 1880 JFK Boulevard, 6th floor, Philadelphia, PA 19103. Equal Opportunity Employer.

HLA DIRECTOR TRAINING PROGRAM-DCI Laboratory in Nashville, Tennessee, is offering a 1 to 2 year training program in HLA typing, Flow Cytom-etry, CyA testing and antithymocyte serum production. Applicant should have a Ph.D. in Immunology and a special interest in Transplantation. Submit curriculum vitae and 3 letters of recommendation to: Deborah Crowe, Ph.D., DCI Laboratory, 1601 23rd Avenue South, Suite 322, Nashville, TN 37212.

POSTDOCTORAL POSITIONS in molecular neurobiology at the VA and Harvard Medical School. Three-year funded positions to investigate gene expres-sion related to cholinergic receptor activation. Back-ground in primer construction, RT-PCR, Northern blot, and in situ hybridization is desirable. Salary \$25,000 to \$40,000 depending on experience. Open to U.S. citizens or permanent residents. Send curriculum vitae to: Dr. Peter Shiromani, VA Medical Center, Research Pro-gram (151C), 940 Belmont Street, Brockton, MA 02401. Equal Opportunity Employer.

#### **POSITIONS OPEN**

Little Rock, Arkansas-The McClellan Veterans Hospital is seeking physician candidates for ASSOCIATE CHIEF OF STAFF for Research and Development. Chiefe OF BTAFF for Research and Development. Closely affiliated with the adjacent University of Arkansas for Medical Sciences (UAMS), the VA/UAMS complex is rapidly growing in terms of patients and faculty. New facilities include the Arkansas Cancer Research Center opened in 1989, the Basic Science Research Building opened in 1993, and an Eve Research Institute opened in 1994. Extramural research funding has doubled in the last five years. Applicant should have an established record of research productivity and eligibility for aca-demic appointment. Applications, including curriculum vitae and publications, should be addressed to: Sudhir V. Shah, M.D., Chairman, Search Committee for ACOS/R&D, VA Medical Center (111D/LR), 4300 West 7th Street, Little Rock, AR 72205. Deadline: March 15, 1994. Telephone: 501-671-2517. Equal Opportunity Employer. Closely affiliated with the adjacent University of Arkansas Opportunity Employer.

CHAIRPERSON, DEPARTMENT OF PHAR-MACOLOGY. The University of South Alabama, College of Medicine. The College of Medicine invites applications and nominations for the position of Chairperson of the Department of Pharmacology. Significant facilities and resources are available to support the continued development of a high-quality research and teaching department. Prospective candidates must have a suitable Ph.D., M.D. or equivalent degree, a record of outstanding research and leadership ability, and a com-

mitment to medical and graduate education. Interested candidates should submit recent curriculum vitae, a brief description of their research interests, and the names and addresses of at least three references no later than April 15, 1994, to: Aubrey E. Taylor, Ph.D., Chairman, Search Committee for Pharmacology Chair, University of South Alabama, College of Med-icine, Department of Physiology, MSB 3018, Mobile, AL 36688-0002. AN AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY EDUCATIONAL INSTI-TUTION.

#### ANATOMY AND CELL BIOLOGY FACULTY POSITION IN NEUROBIOLOGY

The Department of Anatomy and Cell Biology invites applications for a tenure-track position beginning July 1, 1994. Candidates should have a Ph.D., M.D. or equivalent degree, and have demonstrated ability to conduct independent research and attract extramural funding. The department is seeking a neurobiologist with a strong record of achievement in molecular and/or cellular neurobiology. Teaching duties will include gross anatomy and participation in the graduate program. Rank and salary will be commensurate with qualifications. Appli-cants should submit curriculum vitae, a brief statement of research interests, representative reprints, and names of three references to: Dr. George D. Pappas, Search Committee, Department of Anatomy and Cell Biolcommittee, Department of Anatomy and Cen Biol-ogy, University of Illinois, College of Medicine at Chicago, 808 South Wood Street (M/C 512), Chica-go, IL 60612–7308. The University of Illinois is an Equal Opportunity/ Affirmative Action Employer and encourages applications from compare and microiting.

from women and minorities.

**FACULTY POSITIONS**—Astronomy, Biological Science, Chemistry, and Mathematics; Diablo Valley College, a community college in Northern California, has tenure-track positions open in astronomy, biological science, chemistry and mathematics. Applications are available from the Dean of Instruction, Diablo Valley College, 321 Golf Club Road, Pleasant Hill, CA 94523 or by calling (510) 685-1230, extension 1929. Applications cannot be FAXed and must be received by March 14, 1994. The Contra Costa Community College District is an Equal Opportunity/Affirma-tive Action Employer.

#### POSTDOCTORAL POSITION PARASITE IMMUNOLOGY/ CELL BIOLOGY

A position is available beginning July 1994 to study the host: parasite interaction of *Toxoplasma gondii*. Experience in immunology or cell biology using molecular techniques is desired. The candidate should have either a Ph.D. or M.D. and a strong interest in either microbial pathogenesis or immunology. Please submit curriculum vitae and refer-ences to: Lloyd Kasper, M.D., Dartmouth Medical School, Hanover, NH 03755. Dartmouth is an Affirmative Action/Equal Opportunity Employer.

SCIENCE • VOL. 263 • 4 MARCH 1994

#### **POSITIONS OPEN**

#### BIOMOLECULAR NMR SPECTROSCOPY

The Department of Chemistry at Purdue University invites applications for a tenure-track FACULTY POSI-TION to commence sometime during 1995. Applicants are expected to have extensive experience in the application are expected to have extensive expectence in the application of multidimensional NMR spectroscopy to problems of biological significance. It is anticipated that the successful applicant will assume a position of leadership in continu-ing the strong tradition of the Department in NMR spectroscopy. The present facilities include Varian 600 and 500 Mbs and the present facilities include Varian 600 and 500 Mhz instruments plus numerous lower field spectrom-500 Mnz instruments puts numerous lower neta spectrom-eters, a dedicated professional staff including several Ph.D.-level scientists and a highly regarded electronics instrumentation laboratory. Although it is anticipated that the position will be filled at the Assistant or untenued Associate Professor level, applications at other levels will be considered. Applications must include a complete résumé and detailed description of research interests. Applicants should arrange for three letters of recommendation to be sent. Completed applications should be received by May 1, 1994, but applications received after that date will be NMR Search Committee, Department of Chemistry, Purdue University, West Lafayette, IN 47907-1393. Purdue University is an Equal Opportunity/Affirmative Action Emplover.

#### **BIOLOGY INSTRUCTOR**

The Biological and Health Sciences Division on the Foothill College campus is currently accepting applications for a full-time, permanent position to begin in September 1994. Foothill College is located between San Francisco and San Jose in the scientific and technological hub known as Silicon Valley. Primary responsibilities include: microbiol-Silicon Valley. Primary responsibilities include: microbiol-ogy, cell biology, human and general biology. Secondary duties may include: biology of human reproduction, evolu-tionary biology, biology of AIDS, and human genetics. M.A. in Biology or related field (or equivalent) required. Emphasis in cell or microbiology preferred. Applications and complete job descriptions may be obtained from: Employ-ment Services, Foothill-De Anza Community College District, 12345 El Monte Road, Los Altos Hills, CA 94022. Telephone: (415) 949-6217. A résumé or curric-ulum vize may not be substituted for a completed applicaulum vitae may not be substituted for a completed applica-tion. Open until filled, with a first review date of April 8, 1994. Announcement **#94051**. Affirmative Action/Equal Opportunity Employer.

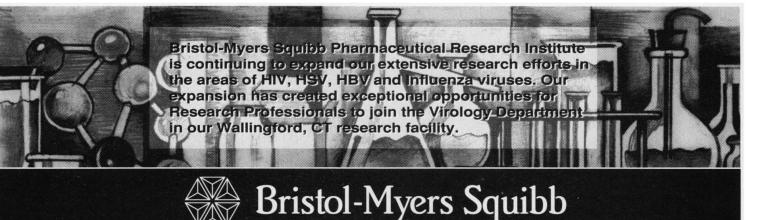
#### JUNIOR FACULTY

The University of Illinois, Section of Environmental and Occupational Medicine is seeking a junior faculty candidate with a Ph.D. in Biophysics, Bioengineering or Physiology (Neuroscience). Preferably one to three years Physiology (Neuroscience). Preferably one to three years of postdoctoral experience. Candidate will join a team that uses and develops new technological approaches to investigate multiple aspects of neural and cellular physi-ology in the lungs. Please submit curriculum vitae and pames of three references to: Donovan B. Yeates, Ph.D./Lid B. Wong, Ph.D., Section of Environmental and Occupational Medicine, 1940 West Taylor Street—M/C 788, Chicago, IL 60612. Affirmative Ac-tion/Eaul Opportunity Employer. tion/Equal Opportunity Employer.

POSTDOCTORAL POSITION. Division of Cardiology, Department of Pediatrics, University of Penn-sylvania and the Children's Hospital of Philadelphia. Postdoctoral Fellow will join ongoing studies investigating the cellular and molecular biology of early vertebrate heart development. Experience in cellular and molecular biological techniques required. Interested individuals should send curriculum vitae, names and contact information of three references to: Kersti K. Linask, Ph.D., Division of Cardiology, The Children's Hospital of Philadelphia, 34th & Civic Center Boulevard, Phila-delphia, PA 19104–4399. Equal Opportunity Employ-ment/Affirmative Action, M/F/D/V.



can publish YOUR LOGO with your one-column line classified ad. No extra fee is assessed: you will be billed at our regular line rate for the number of lines the logo occupies. For details, call **Classified Advertising: 202**-326-6555



## **EXCEPTIONAL CAREERS** IN OUR EXPANDING VIROLOGY DEPARTMENT

Wallingford, Connecticut

#### **GROUP LEADER**

Direct/coordinate the day-to-day efforts of Research Scientists in the area of Herpes or Hepatitis B viruses. This will include basic research studies to identify and evaluate targets for therapeutic intervention of human viruses and the design of high throughput screens for discovery of anti-viral agents. Requirements include a Ph.D. in Molecular Biology, Virology or Biochemistry and 8-10 years of postdoctoral experience. Please reply to: PRI-JW-407A.

#### RESEARCH INVESTIGATORS

Candidates should have a Ph.D. in Molecular Biology, Biochemistry or Virology and previous postdoctoral experience. Successful candidates are expected to conduct independent research studies to define unique viral targets for antiviral intervention, and collaborate with other research groups in the design and development of novel antiviral agents. Please reply to: PRI-HD-409A.

## ASSOCIATE RESEARCH **SCIENTISTS**

Candidates should have BS/MS degree and previous experience working in a research laboratory. Prior training in the area of Molecular Biology, Biochemistry, Virology, or Hybridoma Generation is highly desirable.

#### HIV VIROLOGISTS

Requirements include a Ph.D./MS in Biology or related field and a minimum of 1 year of cell culture experience with HIV. Candidates should be able to work in the Biosafety Containment Laboratory. Experience in the isolation, preparation and characterization of HIV from cell culture and clinical samples, and hands-on familiarity with anti-HIV research are necessary. Please reply to: PRI-HD-402A.

## **HBV VIROLOGISTS**

Requirements include a Ph.D./MS in Biology or related field, plus a minimum of 1 year research experience working with Hepatitis viruses. Candidates should have experience handling virusinfected cells coupled with Molecular Biology or Biochemistry expertise. Please reply to: PRI-HD-411A.

Bristol-Myers Squibb provides competitive salaries, participation in our comprehensive benefits program and continued opportunities for professional development.

Please forward your curriculum vitae (indicating dept. number) to: Human Resource Department, **Bristol-Myers Squibb Pharmaceutical Research** Institute, P.O. Box 4000, Princeton, NJ 08543-4000.

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

Please reply to: PRI-HD-405A.



## VICE PRESIDENT FOR RESEARCH

Utah State University invites nominations and applications for the position of Vice President for Research.

#### **RESPONSIBILITIES:**

· Provide leadership for all members of the University community by promoting and developing funded research, coordinating university research policies and procedures, pursuing technology transfer and other private sector-related research activities, and encouraging and fostering an atmosphere and system that values all forms of scholarly activity • Function effectively with the President, Provost, other Vice Presidents. and Deans as part of an integrated administrative team.

#### **QUALIFICATIONS:**

Required -- • An understanding of the role of research in a comprehensive Research University . A commitment to foster and sponsor research and creative activities among all academic disciplines • An ability to communicate effectively, both verbally and in writing, with a variety of groups ranging from lay persons to legislators and academic researchers . A demonstrated knowledge of the federal funding process and policies • Commitment to continue development of the USU Research Park • Commitment to develop an active program of technology transfer and other partnerships with the private sector • A demonstrated record of responsible fiscal management • Commitment to promote inter- and multidisciplinary research, including the development of thematic research teams . An understanding and endorsement of the land-grant tradition.

Desirable -- • Administrative experience in an academic environment • A terminal degree and personal experience in obtaining and implementing research programs, especially those that are federally funded • Experience interacting with a legislative body in federal or state government • Experience with a variety of research related enterprises on a University campus, e.g., safety office, animal laboratory care facilities, human subjects committees, biohazards regulations and a research library.

#### **INSTITUTION:**

Utah State University was founded in 1888 as the land-grant institution within the public education system of Utah. The student body includes approximately 15,000 undergraduates and 3,000 graduate students from all 50 states and 80 foreign countries. There are 43 academic departments with 850 faculty in eight colleges (Agriculture, Business, Education, Engineering, Family Life, Humanities/Arts/Social Sciences, Natural Resources, and Science). Forty doctoral and 96 master's degree programs are offered. Nearly every college contains one or more specialized research centers. The University's total extramural research support exceeds \$90 million annually. The University, located in Logan, is situated in a beautiful mountain valley 80 miles north of Salt Lake City. The campus is noted for its physical beauty, friendly and intellectual atmosphere, and thriving research enterprise.

#### **APPLICATION:**

Interested applicants should submit a resume which provides: a full representation of qualifications; a letter detailing compatibility between their experience and this position; and names, addresses and phone numbers of five persons who may be contacted as references. Review of applications will begin 15 April 1994 and will continue until the position is filled. Submit nominations and applications to:

Dean James A. MacMahon, Chair Vice President for Research Search and Screening Committee Utah State University, Logan, UT 84322-4400 Phone: (801) 750-2478, FAX: (801) 750-3378 E-Mail: SCIDO @CC.USU.EDU

#### After March 25 all prefixes are 797-xxxx

Utah State University is committed to enhancing multicultural and gender diversity and is sensitive to needs of dual-career couples. We are an AA/EO employer and encourage applications from minorities, women and people with disabilities.

Sterling Winthrop Pharmaceuticals Research Division is the worldwide pharmaceutical research and development organization of Sterling Winthrop Inc. We currently have an opportunity available at our state-of-the-art research acility in Collegeville, PA, for an individual with an academic or industrial laboratory background studying ion channel function and a solid record of publication in peer-reviewed journals.

Research Investigator VASCULAR & BIOCHEMICAL PHARMACOLOGY



The selected candidate will work in a team oriented environment focused on laboratory support of on-going Discovery projects and experimental definition of new ion channel-related molecular targets.

Requirements include a Ph.D. degree and relevant post-doctoral experience although individuals with an MS in biology with 4-6 years related experience are encouraged to apply. Candidates should have expertise in ion channel biology with emphasis on cell types involved in immune function, inflammation, and/or bone metabolism (e.g. T-cells, monocytes/macrophages, osteoclasts). Familiarity with biophysical analysis of ion channels and technical competence in flux measurements, fluorescence techniques, and/or receptor biochemistry is desired.

At Sterling Winthrop, you'll enjoy a highly competitive salary and a comprehensive and flexible benefits package. For confidential consideration, forward your resume and salary requirements to:



Human Resources Position #05-94-AHM Sterling Winthrop PRD Mail Code 4295 1250 S. Collegeville Rd. P.O. Box 5000 Collegeville, PA 19426-0900.

A Division of Sterling Winthrop Inc. A Subsidiary of Eastman Kodak Co.

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

#### Atlantic Cooperative Wildlife Ecology Research Network **Research Chairs in Applied Wildlife Ecology**

The Atlantic Cooperative Wildlife Ecology Research Network, made up of Acadia University, Memorial University of Newfoundland and the University of New Brunswick, in partnership with the Canadian Wildlife Service supported by NSERC, invites applications for a director/senior chair (full professor) and two associate chairs (assistant/associate professor) to address fundamental and applied problems in wildlife ecology and conservation through multi-disciplinary research in marine, coastal and terrestrial ecosystems. Applicants for the senior chair should be well-established scientists who seek an opportunity to direct a world-class program, with distinguished records in university teaching, graduate student supervision, and applying research results to realworld problems. The location of the senior chair will be based on the qualifications of selected applicants. Applicants for associate chairs should have a demonstrated ability to develop innovative research programs, with experience in university teaching and graduate supervision. Successful candidates will teach selected courses, supervise graduate students, and direct research programs in the following fields:

Acadia University, Wolfville, N.S.: Application of theoretical con-Servation biology approaches to managing and conserving biologi-cal diversity, and developing conservation policy; Memorial University, St. John's, Nfid.: Using seabird distribution and ecology to interpret effects of oceanographic conditions, fisher-

es activities and pollution on marine food webs;

University of New Brunswick, Fredericton, N.B.: Relationships among forest structure, forestry practices, and population levels and diversity of forest birds.

The closing date for all applications is 15 April 1994. Applicants should state the university of their choice, and address enquiries and submit a current curriculum vitae and arrange to have three letters of reference sent to:

Dr. R. D. Elliot, ACWERN Coordinator Canadian Wildlife Service, Environment Canada **Box 1590** Sackville, New Brunswick Canada É0A 3C0 Tel. (506) 364-5014 Fax. (506) 364-5062

All applications will be considered, but in accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents in the first instance. Member universities are equal opportunity employers.

# Unilever Research

## Because in the

science of

skin care

there's

## still a lot more to be discovered.

The Skin Science Center at Unilever Research U.S. in Edgewater, NJ is the worldwide research center for the fastest growing sector of Unilever's \$40 billion global consumer products business. Do your career plans include:

- Joining a Fortune 75 company renowned for the quality of its management development?
- Working at the cutting edge of scientific research?
- Operating in a truly global organization linked to a worldwide network of over 4000 scientists?
- If they do, then consider these opportunities:

#### SKIN BIOLOGY Biochemist

Participate in a research program focused on determining the activity and biochemical basis of specific epidermal and dermal modulators. A PhD with 0-2 years postdoctoral experience in Biochemistry or Cell Biology is required. Candidates should also be experienced in a wide variety of biochemical/analytical techniques while prior experience using cell and tissue culture is recommended; a broad knowledge of cellular metabolism, (photo)ageing or signalling pathways is desirable. **Code BC1**.

#### **Cell Biologist**

Participate in a research program investigating cell-cell communication using *in vitro* culture models and *in vivo* systems. A PhD with 0-2 years' postdoctoral experience in Cell Biology or Biochemistry with cell culture experience and a publication record is required. Desirable requirements include an understanding of development biology, knowledge of the effects of UV damage and cutaneous wound repair, and experience utilizing techniques in Molecular Biology and 3-dimensional, multi-cellular culture systems. **Code CB2** 

#### **Biochemist**

Assume direct responsibility for the analysis of a variety of stratum corneum/epidermal markers used to generate a greater understanding of skin problems and to examine the efficacy of a variety of actives treating such problems, as well as assist in the coordination of both in-house and external exploratory studies. A PhD in Biochemistry with 0-2 years' postdoctoral experience is required as well as experience in a variety of biochemical techniques, particularly chromatography, electrophoresis, enzyme assays, and immunochemical assays. A broad knowledge of epidermal research and experience in the handling and analysis of epidermal samples would be desirable. **Code BC3** 

#### CLINICAL RESEARCH Sr. Research Scientist

#### Instruments Development

Direct programs addressing the measurement needs of the skin clinical research programs; provide input into the development of strategic programs and transfer of applied evaluation methods to the operating companies; and interface with the R&D programs as well as other groups working with human subjects (clinical, sensory, and consumer research). Candidates must be familiar with the advances of skin measurement science being made in academia, government and other research facilities. A PhD in a Life Science, Biophysics, Biochemistry, or one of several areas of Measurement Science or Engineering (Bioengineering is particularly desirable) with a minimum of 3 years' relevant experience in applying a broad range of measurement tools to a biological substrate is also required. An MS with 6+ years of relevant experience may be acceptable. Code RS4

If you're ready to join us at the forefront of innovative skin research, we're prepared to offer you a very competitive salary and outstanding comprehensive benefits. For consideration, send your resume indicating position of interest and code on both your cover letter and envelope, to: Mr. Bruce E. Howell, Staffing & University Relations Coordinator, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.



MARINE ECOLOGY: Duke University's School of the Environment invites applications for a tenure-track FACULTY POSITION in Marine Ecology. The rank is pen. The successful candidate will be in residence at the Marine Laboratory in Beaufort, North Carolina. An active research program and quantitative skills are expected. Preference will be given for candidates whose research will utilize local opportunities. Teaching respon-sibilities include marine ecology, a speciality course, and supervision of undergraduate and graduate research. Review of applications will begin April 15, 1994, and will continue until the position is filled. Send curriculum vitae, a brief statement of research and teaching interests and names of three referees to: Dr. Richard B. For-ward, Jr., Chairman, Marine Ecology Search Com-mittee, Duke University, School of the Environment, Marine Laboratory, Beaufort, NC 28516. Duke University is an Equal Opportunity/Affirmative

Action Employer.

#### **COLLEGE OF PHYSICIANS & SURGEONS** COLUMBIA UNIVERSITY POSTDOCTORAL AND STAFF ASSOCIATE POSITIONS

The Biochemistry and Molecular Biophysics Department in conjunction with the Biochemistry and Molecular Biology Section of the Department of Ophthalmology is seeking individuals for two positions at the Postdoctoral and Staff Associate levels to work on Postdoctoral and Staff Associate levels to work on problems dealing with oxidative stress and its relation-ship to cataract formation. Projects include (1) investi-gation of oxidative stress-induced apoptosis and cataract development, (2) effect of oxidative stress on gene regu-lation, and (3) the development of anti-oxidative enzyme mimics. Applicants should have a strong background in cell and moleculer biology. The cell and molecular biology and/or biochemistry. The postdoctoral position is supported by a prestigious NIH training program which requires that candidates be United States citizens or have permanent residence. Submit curric-Suite States of nave permanent restance. Submit Curric-ulum vitae, a brief summary of prior research and three references to: Abraham Spector, Ph.D., Ophthalmol-ogy Research, College of Physicians and Surgeons of Columbia University, 630 West 168th Street, New York, NY 10032. Applications may be FAXed to 212 305-6205. Columbia University takes Affirmative Action to ensure Faual Opportunity. ensure Equal Opportunity.

POSTDOCTORAL POSITION is available immediately for the mapping, cloning, and characterization of human genes with relevance to genome stability. Re-search will be performed in a laboratory within the McDermott Center, a unit with a focus on Human Genome research. Applicants should have a Ph.D. in the biological, biochemical, or molecular biological sciences with experience in molecular biology and/or cytogenetic mechanism. Please context: Dr. Borger A. Schultz Mc. techniques. Please contact: Dr. Roger A. Schultz, Mc-Dermott Center, NB10.120, UT Southwestern Med-ical Center, 6000 Harry Hines Boulevard, Dallas, TX 75235–8591. Telephone: (214) 648-1681; FAX: (214) 648-1666. UT Southwestern Medical Center is an Èqual Opportunity Employer.

#### MOLECULAR IMMUNOLOGY

A POSTDOCTORAL POSITION is available to study the genetic regulation of human CD8, transcripstudy the genetic regulation of human CD8, transcrip-tional and/or post transcriptional. Possibility for *in vitro* as well as transgenic studies. Please send curriculum vitae and names of 3 references to: Dr. P. Kavathas, Depart-ments of Laboratory Medicine, Immunobiology, and Genetics, Yale University School of Medicine, 333 Cedar Street, P.O. Box 208035, New Haven, CT 06520-8035 06520-8035

#### POSTDOCTORAL FELLOWSHIP

A 2-year postdoctoral position is available immediately to study nucleic acid structures and ssDNA-binding proteins using CD spectroscopic, biochemical, and enzy-matic techniques. Preference will be given to applicants who have experience working with DNA:RNA hybrids who have experience working with DNA:KNA hybrids and/or nucleic acid triplexes. Send curriculum vitae and three letters of reference to: Dr. Donald M. Gray, Molecular and Cell Biology Program, MS FO 3.1, The University of Texas at Dallas, P.O. Box 830688, Richardson, TX 75083-0688. Applications will be accepted until March 1, 1994, or until the position is filled. UTD is an Equal Opportunity/Affirmative Action University.

#### **POSITIONS OPEN**

#### POSTDOCTORAL POSITION

An NIH-supported postdoctoral position is available at the Weis Center for Research to study mechanisms regulating hormone-mediated calcium signaling in the laboratory of Carl A. Hansen. The project involves the use of microinjection, flash photolysis and microfluorouse or microinjection, hash photolysis and microfiluoro-metric techniques to elucidate the determinants for re-ceptor-phospholipase C coupling, Ins 1,4,5-P<sub>3</sub>-mediated Ca<sup>2+</sup> mobilization and activation of CA<sup>2+</sup> entry in hepatocytes and cardiac myocytes. The preferred candi-date will have a Ph.D. degree and experience with micropipettes, fluorescent-indicator dyes and/or image analysis analysis

The Weis Center for Research is a modern, wellequipped, medical research facility located in a semi-rural area. Competitive salary and fringe benefits are available. Send curriculum vitae and names of three references to: Geisinger Human Resources (CAH), 100 North Academy Avenue, Danville, PA 17822–1529. Equal Opportunity Employer, M/F/H/V

POSTDOCTORAL POSITION for free radical biochemist to study mechanisms of molecular/cellular injury and defenses against solar UV-induced oxidative stress in marine invertebrates. Skills in free radical biochemistry and antioxidant function are essential; experi-ence in UV biochemistry or invertebrate cell biology is desirable. Ph.D. in biological sciences required. Send letter, curriculum vitae and names and addresses of 3 references to: Dr. J. Malcolm Shick, Department of Zoology, University of Maine, 5751 Murray Hall, Orono, ME 04469–5751. Screening begins 25 March 1994; available 1 July 1994. Equal Opportunity/Affirmative Action.

## PROTEOGLYCANS IN ALZHEIMER'S DISEASE

Two **POSTDOCTORAL POSITIONS** available (April 1, 1994) in the laboratory of **Dr. Alan Snow** in the Department of Pathology at the University of Wash-ington in Seattle. Research in **Dr. Snow's** lab focuses on (GAG's) in the pathogenesis of amyloidosis in Alz-heimer's disease (AD). Candidates with experience in PG/GAG biochemistry and/or amyloidosis are preferentially seeked. Research will include (1) further development of a rat model of AD amyloidosis with specific assessment of neurodegenerative and behavioral consequences of amyloid in brain; (2) development of therapeutics targeting PG-beta-amyloid protein interactions; (3) *in situ* hybridization techniques using PG probes in brain tissue; and/or (4) PG/GAG biochemical techniques for isolation and characterization of PG's/GAG's present in AD brain tissue and lesions; Monies for 3-year postdoctoral fellowships available. Applicants must send curriculum vitae and refrence list to: Dr. Alan D. Snow, University of Wash-ington, Department of Pathology, Neuropathology Labs RJ-05, Seattle, WA 98195. Preferential candidates will be invited to Seattle for interviews.

POSTDOCTORAL POSITION, USDA, Agricultural Research Service (ARS), National Animal Disease Center, Ames, Iowa. The candidate will investigate cytokine (IL-1 $\beta$ , TNF $\alpha$ , and IL-6) expression by cells of long bones in a rodent model with *in situ* hybridization and immunocytochemical techniques. Candidate will be part of a team consisting of a pathologist and molecular biologist. Applicants must have a Ph.D. degree. Minimal of 18 month appointment; salary is commensurate with experience (\$34,662 to \$41,543). Send curriculum vitae and names of three references to: Dr. Mark R. Acker-mann, USDA, ARS, National Animal Disease Center, **P.O. Box 70, Ames, IA 50010; Telephone:** (515) **239-8221.** Applications in response to this advertise-ment should be marked **4NO26**. Applications will be accepted until the position is filled. USDA/ARS is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available summer 1994 for Ph.D./M.D. specializing in neuropharmacol-ogy/physiology. Interdisciplinary experience desirable in analysis of brain neurotransmitter activity in relation to alcohol/substance abuse, hunger, other behaviors. Send curriculum vitae and three letters of recommendation to: School of Medicine, East Carolina University, Green-ville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. Affirmative Action/Equal Employment Opportunity.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION at USDA, Agricultural Research Service, Clay Center, Nebraska, available immediately to investigate molecular mechanisms related to ovarian follicular selection and atresia in swine. Cooperative research between reproduction and genome mapping/expression groups with access to excellent facil-ities and diverse breeds. Candidates with experience in molecular biology, particularly gene expression, are en-couraged to apply. Minimum salary of \$34,662. USDA, Agricultural Research Service is an Affirmative Action/Equal Opportunity Employer. Send curriculum vitae and names of three references to: Dr. Joe Ford, U.S. Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933.

POSTDOCTORAL POSITION available immediately to investigate the molecular mechanisms associated with hematologic toxicity induced by anti-AIDS drugs and HIV-infection of bone marrow cells. Experience in laboratory techniques of cell culture, virology and molecular biology is required. Send curriculum vitae and names of three references to: **Dr. Krishna C. Agrawal**, Professor of Pharmacology, Tulane University School of Medicine, SL83, New Orleans, LA 70112. Tulane is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL RESEARCH IN PATHOLOGY

A postdoctoral position is immediately available to study the pathogenesis of a *Chlamydia trachomatis* genital infection. Experience in protein chemistry, recombinant DNA, immunology, vaccine development and animal models is desired. Send curriculum vitae and names and ddresses of three references to: Luis M. de la Maza, M.D., Ph.D., Professor, Department of Pathology, Medical Sciences I, D 440, University of California, Irvine, CA 92717–4800. The University of California, Irvine, is an Affirmative Action/Equal Opportunity Employ-er and specifically invites and encourages applications from women and minorities.

POSTDOCTORAL POSITION available immediately in a collaborative project in the laboratories of **R. R.** Freedman (Psychiatry), J. L. Ram (Physiology), and J. R. Sowers (Endocrinology & Hypertension) to study cellular and hormonal mechanisms mediating gender differences in cardiovascular function. Research utilizes isolated vascular preparations, cell culture, patch clamp-ing, and mRNA measurements. Candidates experienced in several of these techniques are encouraged to apply. Send curriculum vitae and three letters to: Dr. J. L. Ram, Department of Physiology, Wayne State University, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION VISION RESEARCH

Interdisciplinary study of primate visual system, both human and monkey. Focus on biology and psychology of the fovea, with emphasis on functions of macular pigment and effects of nutritional manipulation. Applicants are expected to have expertise in at least one relevant discipline (core techniques: anatomy, densitometry, psy-chophysics) and will receive training in others. Private money is available and can be used to back up an NRSA application. Exceptionally well-qualified individuals who do not meet NRSA restrictions can also be considered. Send curriculum withe and names addresses and tele Send curriculum vitae and names, addresses and telehone numbers of three references to: Dr. Max Snodderly, Schepens Eye Research Institute, 20 Staniford Street, Boston, MA 02114.

Affirmative Action/Equal Opportunity Employer, M/F/H/V.

The Department of Microbiology at the University of Texas Health Center at Tyler, Texas, is seeking applica-tions from qualified candidates for a **POSTDOCTOR**-AL POSITION that will be concentrating on the molecular biology and genetics of mycobacteria, including Mycobacterium tuberculosis. The major directive of the research will be to identify, clone and characterize the functional roles of analogs of *E. coli* recombination genes in mycobacterial pathogenesis. Experience in microbial genetics and protein/DNA biochemistry with an interest in bacterial pathogenesis and drug resistance is necessary. Please send résumé and three current letters of reference to: Donald R. Nash, Ph.D., Department of Microbiology, The University of Texas Health Center at Tyler, P.O. Box 2003, Tyler, TX 75710. An Equal Employment Opportunity/Affirmative Action Employer. M/F/V Disabled.2.



#### CHAIRPERSON, DEPARTMENT OF PEDIATRICS THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE AND MEDICAL DIRECTOR, CHILDREN'S HOSPITAL, COLUMBUS, OHIO

The Ohio State University College of Medicine, Department of Pediatrics, and its affiliated hospital and research institution, Children's Hospital, are seeking outstanding candidates to provide leadership for a dual role as the Chair of the Department and Medical Director for the hospital. As Chair, this individual reports to the dean and will be responsible for developing and overseeing pediatric curriculum for medical students and other trainees, encouraging the development of new programs and establishing goals and objectives for both new and existing programs, providing academic and medical support and guidance for faculty and new and existing research interests and leading the faculty practice plan.

As Medical Director, this person will report to the Board of the hospital with the primary responsibility to provide medical leadership ensuring the highest quality of teaching, research and clinical care. This person will also be responsible for recruitment, hiring, administrative medical appointments, evaluation of physicians and providing medical direction within the context of healthcare reform. Qualifications include an M.D. degree with a national reputation and demonstrated leadership experience in a successful academic pediatric program. A successful record of obtaining grant support is important to qualify for a senior faculty position. Successful candidate should have a strong record of accomplishment in teaching and research programs and a commitment to developing interdisciplinary, externally-funded research programs within the medical center. Knowledge of current trends in healthcare reform is critical.

Send nominations or letters of interest with CV to: Stephen A. Koff, M.D., Chairperson, Search Committee, Education Bldg., ED343, 700 Children's Drive, Columbus, OH 43205-2696.

The Ohio State University and Columbus Children's Hospital are Equal Opportunity/Affirmative Action Employers. Qualified women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

#### THE FIFTH MEETING ON THE MOLECULAR BASIS OF CANCER

1994 Meeting Organizers -

Mark A. Israel, M.D. Department of Neurological Surgery and Pediatrics University of California, San Francisco June 16-18, 1994 Hood College Frederick, Maryland

Tyler Jacks, Ph.D. Center for Cancer Research Massachusetts Institute of Technology

Now in its fifth year, this sister meeting to the Annual Oncogene Meeting, provides a forum for studies most closely linked to human cancer, including basic research approaches to understanding the cancer cell and tumor development as well as the more applied areas of diagnosis and therapy.

Plenary Lecture - Gene Therapy in the Management of Cancer Albert Deisseroth, M.D. MD Anderson Cancer Center

Session I. - Gene Regulation and Cancer Cell Growth Edward Harlow, Ph.D. Massachusetts General Hospital

Session II. - Cancer Genetics Kenneth Kinzler, Ph.D. The Johns Hopkins University Session III. - Cell:Cell and Cell:Matrix Interactions Richard Hynes, Ph.D. Massachusetts Institute of Technology

Session IV. - Tumor Cell Proliferation and Apoptosis Craig Thompson, M.D. University of Chicago

Session V. - Rational Approaches to Diagnosis and Therapy Frank McCormick, Ph.D. Onyx Pharmaceuticals

You are invited to participate in a comprehensive exchange of research in a forum which encourages the young investigator to submit unpublished data for consideration by the organizers as podium or poster presentations. The deadline for abstract submittal is April 8, 1994; the deadline for registration is June 3, 1994. The registration fee (including meals and campus housing) is \$550.00 US.

For information and registration materials, please contact Margaret L. Fanning, Conference Coordinator, FACS, P.O. Box 249, 12120 Main Street, Libertytown, Maryland 21762. Telephone 301-898-9266 • FAX 301-898-9173.

#### POSTDOCTORAL POSITION

Position available in the laboratory of Dr. John Krupinski at the Weis Center for Research in Danville, Pennsylvania. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of the expression and characterization of novel forms of adenylyl cyclase (see *J. Biol. Chem.* **267**:24858–24862). Emphasis will be placed on determining those structural features of the adenylyl cyclases responsible for mediating unique physiological effects. The Weis Center is a well-equipped, modern research facility in a semi-rural environment. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to: Geisinger Human Resources (JK), 100 North Academy Ave-nue, Danville, PA 17822–1529. Equal Opportunity Employer, M/F/H/V.

POSTDOCTOR AL POSITIONS available to study molecular mechanisms of oncogene function. Projects focus on myc and myb gene function in normal mouse development using gene targeting. Excellent opportunity to learn embryonic stem cell culture, vector design for gene targeting, and transgenic methods. Candidates with strong background in molecular biology, genetics and cell culture preferred. Send curriculum vitae and description of previous experience to: Dr. Kimi Hatton, Fels Institute, Room 332, Temple University School of Medicine, 3307 North Broad Street, Philadelphia, PA 19147. Temple University is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION IN PLANT MO-LECULAR BIOLOGY. A two-year position is available for a talented, hard-working scientist interested in further developing techniques for soybean transformation and regeneration. Requirements include a Ph.D. with experiregeneration. Requirements include a Ph.D. with experi-ence in cloning and sequencing, preferably with plant material, demonstrated by publication in a major refereed journal. Familiarity with Ti plasmid-mediated transforma-tion, regeneration and techniques for analysis of gene expression is also expected. Proficiency in writing scientific articles and preparing concise and timely reports is intrinsic to the position. Since extensive use is made of imaging and to the position. Since extensive use is made of imaging and sequence analysis, familiarity with computers and related software is desirable. *Candidates must be U.S. citizens or hold* a current visa for working in the United States. Dr. Timothy C. Hall, I.D.M.B., Texas A&M University, College Station, TX 77843-3155 USA. FAX: 409-862-4098, E-mail: tim@bio.tamu.edu.

POSTDOCTORAL POSITION to investigate the molecular biology of eukaryotic cell resistance to, and survival of, plasma membrane disruption induced by mechanical force [see *Trends Cell Biol.* **3**, 302 (1993)]. mechanical force [see *Trends Cell Biol.* 3, 302 (1993)]. Experience in molecular biological approaches for char-acterizing gene expression, or related technologies, re-quired. Please send curriculum vitae and three letters of reference to: Dr. Paul L. McNeil, Department of Cellular Biology and Anatomy, Medical College of Georgia, Augusta, GA 30912. Telephone: 706-721-3065; FAX: 706-721-6839.

MCG IS AN EQUAL OPPORTUNITY EMPLOY-ER. WOMEN, MINORITIES AND THE DIS-ABLED ARE ENCOURAGED TO APPLY.

#### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL MASSACHUSETTS GENERAL HOSPITAL

A POSTDOCTORAL FELLOWSHIP position is available for a bright and highly motivated Ph.D. or M.D. with experience in MOLECULAR BIOLOGY, MOLECULAR IMMUNOLOGY and/or GENET-ICS. The position involves joining an outstanding team of scientist studying the molecular and functional prop-erties of genes involved in the immune response in humans. Prior experience and technical competence in transcription and translation assays, CDNA libraries, transcription and translation assays, CDINA libraries, cloning, sequencing, mRNA splicing or genomic rear-rangement studies would be viewed favorably. Beautiful laboratories, an important scientific project and an ap-pointment at both Harvard Medical School and MGH represent features of this position. Interested individuals should send curriculum vitae and two letters of reference to: Ms. Lynne Murphy, Administrative Assistant, Immunobiology Lab., Massachusetts General Hospi-tal, Building 149, 13th Street, CNY-3, Charlestown, MÁ 02129

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION. Available immediately to study the assembly pathway of cytochrome oxidase and the roles of heat shock and specific "assembly facilitator" and the roles of heat shock and specific "assembly facilitator" proteins in it. Studies will be performed with yeast and human genes. Candidates should have a Ph.D. in biochemistry, genetics, or molecular biology. Experience with yeast genetics/molecular biology is preferred. Send curriculum vitae and names of references to: **R.O. Poyton, MCD Biology, Box 347, University of Colorado, Boulder, CO 80309–0347.** An Affirmative Action/Equal Opportunity Employer. Application deadline is March 14, 1994.

POSTDOCTORAL POSITION IN MOLECU-LAR IMMUNOLOGY to identify and characterize the cellular targets of a novel viral polypeptide that inhibits antigen presentation to T lymphocytes. Experience with molecular techniques required. Send curriculum vitae and list of three references and telephone numbers to: Dr. David Johnson, Room 4H30/HSC, McMaster University, Hamilton, Ontario, Canada L8N 3Z5.

#### POSTDOCTORAL POSITION CYSTIC FIBROSIS RESEARCH CENTER U. CALIFORNIA-SAN FRANCISCO

Available now to study defective regulation of airway fluid content in cystic fibrosis. Work will involve measurement of ion and fluid transport by cultures of human airway epithelium, and other experimental approaches. Send curriculum vitae and three letters of reference to: Jonathan Widdicombe, Cardiovascular Research In-stitute (Box 0130), University of California–San Francisco, San Francisco, CA 94143.

#### POSTDOCTORAL POSITION PROGRAM FOR MECHANISMS OF INFECTIOUS DISEASES OF MUCOSAL SURFACES

An immediate opportunity for an individual to particpate in a research program focused on the interaction of bacterial and viral ligands with cellular receptors. Candi-dates should have a Ph.D. in microbiology, biochemistry or a related field. The candidate should have experience in either protein purification, immunochemistry, virology and/or bacteriology. Send curriculum vitae, transcripts, three references, and a one-page summary of research interests by April 1, 1994, to: Dr. David A. Benfield, Department of Veterinary Science, P.O. Box 2175, South Dakota State University, Brook-ings, SD 57007–1396. Affirmative Action/Equal Opportunity Employer/ADA. Reasonable Accomodations: (605) 688-4128, [TT/Voice: (605) 688-4394].

POSTDOCTORAL FELLOWSHIPS in psychoneuroimmunology, neuroendocrinology, and neuroimmu-nology at the Ohio State University. An NIMH-supported training grant for scientists or clinicians (Ph.D. and/or M.D., D.D.S., D.V.M.) to conduct research on communication D.D.S., D.V.M.) to conduct research on communication among the nervous, endocrine, and immune systems is available July 1, 1994. *Applicants must be U.S. citizens or permanent residents of the United States*. Applicants should submit a letter stating their research interests along with curriculum vitae and the names of three references to: John F. Sheridan, Ph.D., Box 192 Postle Hall, 305 West 12th Avenue, The Ohio State University, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/ Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

#### POSTDOCTORAL FELLOW

Postdoctoral position is available to study growth reg-ulation of the prostate. Cell or developmental biologists with expertise in molecular biology, in situ hybridization and cell culture with strong background in the area of growth factors are preferred. Junior- and senior-level scisentists are encouraged to apply. Send curriculum vitae and 3 references to: Dr. Gerald R. Cunha, Department of Anatomy, University of California, San Francisco, CA 94143. An Equal Opportunity/Affirmative Action Employer.

> More than 159,000 people paid to see your ad in SCIENCE.

Classified Advertising Department Telephone: 202-326-6555 FAX: 202-682-0816

#### **POSITIONS OPEN**

POSTDOCTORAL FELLOW: Cell Biology/Cellular Biophysics. Two positions available immediately. To study architecture, dynamics and regulation of cytoskel-eton in living cells. Ph.D. required. Experience in cell culture, protein biochemistry, digital fluorescence mi-croscopy, FRAP desired. Send curriculum vitae and names of three references to: Dr. Kate Luby-Phelps, Department of Physiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235–9040. FAX: (214) 648-8685. An Equal Opportunity/Affirmative Action Employer.

#### U.S. DEPARTMENT OF AGRICULTURE SCIENCE FELLOW POSITION IN MOLECULAR BIOLOGY WITH D.V.M. AND/OR Ph.D.

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service announces a unique scientific fellowship dedicated to recombinant expression and utilization of diagnostically useful proteins derived from animal disease pathogens of international importance.

Requirements: Candidate will have competence in all standard molecular biological techniques of nucleic acid and protein analysis and specific experience with bacteri-al, insect, yeast, and/or mammalian genc expression systems. Outstanding candidate will have a D.V.M. and/or Ph.D. degree in the biological sciences with provide representation recombinant matteria specific experience in recombinant protein expression.

Work Environment: The science fellow will work with teams of classical and molecularly oriented animal health professionals at USDA's National Veterinary Services Laboratories located at Orient Point, New York and Ames, Iowa. World class facilities, equipment, and support will be provided, as will the opportunity for interaction with USDA's Agricultural Research person-nel and nearby university scientists at both locations. Publication will be supported and expected. **Position Tenure:** Position funded for 2 years with

possibility extending additional 2 years.

Application Information: Call (612) 370-2200 for Announcement #AG-VS-062 and necessary applica-tion forms. Applications must be postmarked by March 18, 1994. For general information on the Science Fel-lows Program call 1-800-762-2738. U.S. Citizenship is REQUIRED. The Federal Government is an Equal Opportunity Employer.

#### POSTDOCTORAL FELLOWSHIP

Merck Research Laboratories, a leader in pharmaceutical research, has an immediate postdoctoral fellowship opening in the Biological Chemistry Department. The successful candidate must be a recent Ph.D. graduate or successful candidate must be a recent rh.D. graduate of someone expecting a Ph.D. in the very near future with research expertise in the characterization of integrins. Experience in closing and expression of membrane re-ceptors and antibody production is required. In addition, experience in immunofluorescent microscopy would be desirable. Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to: Personnel Manag-er, Ad#D-4, MRL Human Resources WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. Equal Employment Opportunity/Affirmative Action/V/Employer.

POSTDOCTORAL FELLOWSHIP to work on the molecular biology of nitric oxide-guanylate cyclase signalling pathway with dynamic research group at the Signaining pathway with dynamic research group at the University of Virginia. Molecular biology expertise es-sential, promoter analysis experience preferable. Applica-tions detailing molecular biology experience to: Roger A. Johns, M.D., University of Virginia Health Scinces Center Box 238, Charlottesville, VA 22908 USA. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS (U.S. citizens/permanent residents)-Plasticity of signal transduc-tion (G-protein coupled receptors/cytokine signaling sys-Research efforts involve a multifaceted approach tems). R to (1) define the receptor's microenvironment and (2) identify determinants of signaling specificity and the transcriptional/translational regulation of  $\alpha_2$ -adrenergic receptor expression. Interactive research environment in a charming coastal area. Send curriculum vitae and three letters of reference to: Stephen M. Lanier, Ph.D., Department of Pharmacology, Medical University of South Carolina, 171 Ashley\_Avenue, Charleston, SC 29425. Equal Opportunity/Affirmative Action Employer.

	AMERICAN ASSOCIATIO	Meeting of th N FOR CAN 4 San Francisco, CA	CER RESEARCH
TACER, REPEAU	An Outstanding Scientific Program That Integrates the N		
Sat. Afternoon	SCIENTIFIC SESSIONS Methods Workshop: Confocal Microscopy and Quantitative Image Analysis, James P Slattery, Stephen J Lockett, Curits T		Symposium: Genomic Imprinting and Its Role in Can Andrew P. Feinberg, Uta Francke, Carmen Sapienza, M A: Surani, Benjamin Tycko
April 9	Thompson, D.R. Sandison Methods Workshop: Quantitative Genotyping and Phenotyping Using Flow Cytometry and Fluorescence in Situ		Symposium: Novel Strategies in Chemical Prevention of Can- Paul Talalay, Herrman Adlercreutz, Brian Ketterer, Stephen Hecht, Thomas W Kensler
Sun. Morning	<ul> <li>Hybridization, Fredika M Robertson, Joe W Gray, Steven Sherwood, Dan Pinkel</li> <li>Plenary Session: The Biological and Clinical Roles of Genetic Markers - Karen S. H. Animan, Leland H Hartwell, Thea D.</li> </ul>		Symposium: Mechanisms and Circumvention of Drug Resistan Barton A. Kamen, Mark Meuth, Grant R. Wilkinson, Stanton Gerson, Roger G. Deeley
April 10 Sun. Afternoon	<ul> <li>Tlsty, Eric J. Stanbridge, Ilan R Kirsch, Stephen H Friend</li> <li>G. H. A. Clowes Memorial Award Lecture - Mary-Claire King Symposium: Recent Advances in Environmental</li> </ul>	Wed. Morning Aprıl 13	C. P. Rhoads Memorial Award Lecture - Igor B. Roninson Symposium: Tumor Suppressor Genes and Cell Cycle Cont Michael B. Kastan, David Beach, Ira Herskowitz, James
April 10	Carcinogenesis - Kenneth Olden, Paul Kleihues, J Carl Barrett, Frederica Perera, Curtis C. Harris Symposium: Cellular Signaling - Joseph Schlessinger, Arthur	April 19	Roberts, Jean Y J Wang Symposium: Hormonal Carcinogenesis: Epidemiological a Mechanistic Studies - Barbara S Hulka, Joachim G Lie Herrman Adlercreuit., George M. Stancel, Kathryn B Horw
	Weiss, Axel Ullrich, Tony Hunter Symposium: AIDS-related Malignancies - Alexandra M. Levine, Samuel Broder, Barbara Ensolt, Susan E. Krown, Gianluca Gaidano		Pentti K Sitteri Symposium: Topoisomerase I Inhibitors: Molecules to Medic Randall K Johnson, Mary-Ann Bjornsti, Sidney M Hecht, Hirofu
	Symposium: Solid Tumor Physiology and Therapeutic Approaches - Beverly A. Teicher, Peter W Vaupel, Rakesh K Jain, Chang W. Song, Robert Auerbach	Wed. Afternoon	Nakano, Robert P. Heitzberg, Eric K. Rowinsky Bruce M. Cain Award Lecture - Mansukh C. Wani and Moni E. Wall
	Symposium: Conducting Cancer Research among Minority Populations in the United States - Jose Russo, G. Marie Swanson, Altvia E. Alvarez, Lucille Adams-Campbell, Mary B Daly, Manuel R Modiano, Electra D. Paskett, Edward E Partridge	April 13	Symposium: Integration of Cytokines and Radiation: Biologi Basis and Preliminary Clinical Trials - Zvi Fuks, Ralph Weichselbaum, Joost J Oppenheim, Timothy J Kinsella, Randy Jirtle
	Presidential Address - Margaret L. Kripke		Symposium: Cell Adhesion in Invasion and Metastasis-David Cheresh, Kenneth Yamada, Richard Assoian, Zena Werb, Ajit Va
	Symposium: Survival and Success in Cancer Research: Toward the Year 2000 - Sandra L White, John Alderete, Neil J Clendenum, Michele K Evans, Clifton A. Poodry, Eugene Cota- Robles, Nicholas J. Kenney, Carol Wood Moore, Ricardo J.	SESSIONS OF PROFFERED PAPERS	Minisymposia, poster discussion sessions, and regular pos sessions will be organized from over 3,800 submitted papers in areas of cancer research.
Mon. Morning	Parker Symposium: Hematological Malignancies: Biology and Therapy Riccardo Dalla-Favera, A Thomas Look, Michael	FEES	GENERAL INFORMATION \$12: Member Registration (includes Proceedings) \$243 Predoctoral Student and
April 11	Cleary, Pier-Giuseppe Pelicci, James Ihle Symposium: New Approaches to Cancer Immunotherapy Olivera J. Finn, Graeme J. Dougherty, David A. Berd, Pramod K. Srivastava, Philip E Thorpe, Robert Chesnut		Associate Member Registration \$66 Proceedings of the AACR \$33 *Discounts applied for registrations received before February 18, 199
	Symposium: Retinoids and Cancer - Lorraine J Gudas, Keiko Ozato, Joseph F Grippo, David R Parkinson, Christine Chomienne		Employment Register: Candidates: AACR Members \$11 Nonmembers \$2
	Symposium: Transcriptional Control of Cell Proliferation and Differentiation - Robert N. Eisenman, Inder M. Verma, Michael Levine, Helen Blau		Employers:     32.       AACR Members     \$7:       Nonmembers     \$12:       Commercial Firms     \$27:
	Controversy Session: Fat and Breast Cancer: Can an Intervention Trial Resolve the Issue? Laurence N Kolonel, Ross C. Prentice, Walter C. Willett American Cancer Society Award Lecture - Brian E Henderson		*\$225 for firms in AACR Exhibit Show
Mon. Afternoon April	Symposium: Programmed Cell Death - Stanley J. Korsmeyer, Eileen White, Junying Yuan, Laurie Owen-Schaub, Tyler Jacks Symposium: New Strategies for Immunological Intervention Hans Schreiber, You Hui Zhang, Michael P Bevilacqua, Giorgio Trinchieri, Joseph Ilan, Lee M Nadler	PUBLICATIONS	The Proceedings of the American Association for Cancer Resear contains abstracts of all papers accepted for presentation by the Progra Committee and extended abstracts of symposium presentations a special lectures. The <i>Proceedings</i> is received by all members wi paid-up subscriptions to AACR journals, or it may be purchased at t time of registration for \$35.
	Symposium: Diet and Cancer: The Role of Protective Factors Walter C. Willett, John D Potter, Geoffrey Howe, Michael B Sporn, William J Blot		The <i>Program</i> of the Annual Meeting of the American Association f Cancer Research is included in the registration fee. Detailed listings of available positions and prospective candidates w
	Symposium: Basic and Clinical Aspects of Prostate Cancer Donald S Coffey, Norman Greenberg, J. S Rhim, Robert E. Bookstein, Jonathan W. Simons, William G. Nelson, Kenneth J. Prenta	EMPLOYMENT REGISTER	be available for consultation during the Annual Meeting and will published in the <i>Proceedings</i> and in three issues of the Association journal <i>Cancer Research</i> . Interviews will be scheduled in S Francisco.
	<b>Controversy Session:</b> Is Multidrug Resistance an Important Factor in Therapeutic Outcome? - William T Beck, William S	EXHIBIT SHOW	Displays by over 100 firms offering the most up-to-date produc services, and publications for both basic and clinical cancer researcher
	Dalton, Peter J. Houghton, Branimur I. Sikic, S. B. Kaye, Helen S. L. Chan, Igor B. Roninson Business Meeting	TRAVEL AWARDS FOR YOUNG INVESTIGATORS	Upjohn, Ciba-Geigy, and Bristol-Myers Oncology Awards For presenters of meritorious abstracts as selected by the Progra Committee. No formal application necessary. Predoctoral studen postdoctoral fellows, and physicians in training are eligible.
ues. Morning Aprıl 12	Symposium: Basic Science Approaches to Breast Cancer Mina J. Bissell, Advian L. Harris, Suzanne A. W. Fuqua, Helene S. Smith, Ray L. White		Comprehensive Minority Biomedical Program of the National Cancer Institute For predoctoral students, postdoctoral fellows, or physicians in traini
	Symposium: Genetic Basis for Tumor Cell Sensitivity to Radiation - John B. Little, Albert J Fornace, Jr., Barbara A. Osborne, Eihel Moustacchi, Michael Christman Symposium: Intermediate Endpoints in Cancer Prevention		<ul> <li>in the U.S. and Canada from minority groups that have be traditionally underrepresented in cancer research.</li> <li>Women in Cancer Research will organize several sessions during t</li> </ul>
	Gary J. Kelloff, Charles W. Boone, Michael Wargovich, Reuben Lotan, David Sidransky	WICR SESSIONS	meeting that will be of interest to all registrants. Advance Registration (includes advance mailing
	Symposium: Pharmacogenetics: Role of Drug Metabolism Polymorphisms in Cancer Chemotherapy - Frank J Gonzalez. William E. Evans, Richard Weinshilboum, Robert B. Diasto, Mark J Ratain	DEADLINES	of Program and Proceedings)         February 18, 19           Hotel Reservations         March 7, 19           Special fares available on Delta Air Lines and United Airlines through
	Controversy Session: Is Bone Marrow Transplantation Indicated for Adult Acute Leukemia in First Remission? - Clara D Bloomfield, Thomas Buchner, Stephen J. Forman	AIR TRAVEL	Uniglobe Travel, 800-243-4370 (from U.S. and Canada only) or 21 628-3322 (FAX).           Hertz Rent a Car         800-654-2240         Account Number 3353
ues. Afternoon	Richard and Hinda Rosenthal Foundation Award Lecture Marc E Lippman Symposium: Potential Applications of Advances in Cell and Molecular Biology to New Therapies for Lung Cancer - John	CAR RENTAL INFORMATION AND FORMS	American Association for Cancer Research Public Ledger Building 620 Chestnut Street, Suite 816
April 12	Molecular Biology to New Therapies for Lung Cancer - John D Minna, Gail L. Shaw, Adi F. Gazdar, Paul A. Bunn, Jr., David P Carbone, Jack A Roth		Philadelphia, PA 19106-3483 215-440-9300 FAX: 215-440-9313

## ANALYTICAL BIOCHEMISTRY RESEARCH GROUP

Merck Research Laboratories, a world leader in the development of pharmaceutical and biological products, has two challenging opportunities available at its Rahway facility to work in the area of Immunology and Inflammation Research.

**SENIOR PEPTIDE CHEMIST** – The selected candidate will work closely with a team of medicinal chemists in the design and synthesis of receptor antagonists. A Ph.D. in Chemistry along with a strong background in peptide chemistry, cyclic peptides, and peptidomimetics are required. Excellent communication skills and the ability to function effectively in a multidisciplinary environment are essential. A background in molecular modeling is desirable. **Ad #150**.

**SENIOR PROTEIN BIOCHEMIST** – Primary responsibilities will include the isolation of novel native proteins as well as the purification, refolding and characterization of recombinant proteins. A Ph.D. in Biochemistry or related discipline, the ability to interact effectively with diverse groups and strong communication skills are required. A working knowledge of physical methods to monitor protein refolding reactions is highly desirable. **Ad #151**.

Merck Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, send your resume indicating Ad # and the names of three references to Human Resources Manager, Merck & Co., Inc., P.O. Box 2000, Rahway, NJ 07065. EEO/AA/VH/Employer.



#### PENNSTATE

**13th Summer** Symposium in Molecular Biology August 3–5, 1994

#### "Molecular and Cellular Mechanisms of Toxicity"

- I. Free Radicals
- II. Structure–Activity Relationships
- III. Molecular Carcinogenesis/ DNA Repair
- IV. Molecular Mechanisms of Toxicity

#### Keynote Speaker – Peter B. Dervan, California Institute of Technology

\*Posters \*Exhibits \*Social Events

- Sponsors: Penn State's Eberly College of Science, Biotech Institute, Bioprocessing Resource Ctr, Depts of Biology, Biochem/Mol Biology, Cell/Molecular Physiology, Veterinary Sci; Corning-Costar, Schering-Plough
- Contact: Pat Phillips, Symposium Coord., Penn State Biotech Institute, 519 Wartik, University Park, PA 16802; 800-833-5533. Abstracts due 5/27/94.

## **RESEARCH OPPORTUNITIES**

We are currently seeking the following science professionals:

#### **RESEARCH SCIENTIST**

Pharmaceutical Corporation is focused on the discovery of novel drugs which regulate G protein-mediated signaling pathways. Cadus is applying its target-driven discoverv technology in the area of inflammation, cardiovascular and neurological disorders.

Cadus

Requires BS/MS with minimum of 3-7 years practical lab experience in biology, biochemistry or bioengineering. Lab experience with microbiological systems (bacterial & yeast) essential; familiarity with human tissue culture techniques desirable. DOS competence, database & programming expertise and experience commensurate with information management in a highly automated laboratory setting required. Substantial experience in assay design and development (ELISA, RIA, cell activation, cell adhesion). Experience in assay automation and high-throughput assay system highly desirable. Excellent written and verbal skills required. Responsibilities include design, execution and maintenance of automated screening protocols using BioMek and Zymark robotic systems. (Attn: RS SEARCH)

#### **RESEARCH ASSOCIATE**

BS/MS with minimum 2 years practical lab experience in molecular and cell biology to assist in development of pharmaceuticals targeted at major signal transduction pathways. Work will involve a variety of molecular biological approaches in bacterial, yeast and mammalian tissue culture systems. Experience with basic protein analysis desirable. Excellent written and verbal skills required. Knowledge of Windows essential, familiarity with databases and Word 6 preferred. (Attn: RA SEARCH)

We offer competitive salaries and benefits. Send CV and list of recommendations, indicating search of interest, to: HR Department, Cadus Pharmaceutical Corporation, 180 Varick St., 9th Floor, New York, New York 10014. Cadus is an equal opportunity employer.

## Magainin Pharmaceuticals Inc.

...is a biopharmaceutical company dedicated to the research, development and commercialization of anti-infective and anti-cancer products based upon compounds isolated from the host defense systems of animals. We seek energetic, highly motivated individuals with commitment, excellent training and communication skills to expand our R&D efforts in the following key areas:

#### Scientist Organic Chemistry

Ph.D.

Seeking a motivated Ph.D. organic Chemist (0-3 years post-doc) with experience in the synthesis of steroids and/or antibiotics. Facility with 2D NMR experiments would also be advantageous.

#### Scientist Peptide Chemistry Ph.D.

Candidates should possess a Ph.D. with interest and experience in drug discovery, host defense peptides, structure activity studies and peptide mimetics.

For consideration, submit curriculum vitae (indicate position desired) and salary requirements to: Human Resources, Magainin Pharmaceuticals Inc., 5110 Campus Drive, Plymouth Meeting, PA 19462.

MPI is located in new, state-of-the-art facilities in suburban Philadelphia. We offer excellent salaries, benefits, outstanding scientific interactions and the opportunity to change the future of therapeutics. An Equal Opportunity Employer. No phone calls, please.



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

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

#### TOXICOLOGIST

Reporting to the Director, Scientific Operations, the successful candidate will possess at least one degree in the biological sciences and have a minimum 3-7 years experience directing studies for GLP submissions in pharmaceutical or contract research industry. Responsibilities will include studies in other disciplines of toxicology after appropriate training. Strong interpersonal skills and a high level of energy are definite assets.

#### **MARKETING REPRESENTATIVE (U.S.A.)**

The successful candidate will possess a background in biological sciences. This position is accountable for marketing all of our research services to a variety of applicable industries including existing and potential clients as well as new target markets. Experience working in a contract research environment and/or in selling research services are definite assets. Frequent travel, a high degree of autonomy and self-motivation are requirements.

#### **VETERINARY PATHOLOGIST**

The successful candidate will possess a D.V.M. with an M.Sc. or D.V.Sc. in Pathology. Responsibilities include interpretation of studies in animals to evaluate toxicity of potential new pharmaceutical, agrochemical and biotechnology products. The successful candidate will also participate in neurotoxicology, immunotoxicology, and biomaterial research as well as in a diagnostic pathology service offered to veterinarians.

Interested candidates please contact our Executives at the Society of Toxicology meeting (C. Perkin, Scientific Operations; B. Osborne, Marketing);

or MAIL/FAX your resume to: ATT: Director, Human Resources

to:



BIO-RESEARCH

We promote equality in the workplace and enjoy a clean air environment

87 Senneville Road, Senneville, (Montreal) Quebec H9X 3R3 Tel<sup>.</sup> (514) 630-8200 Fax: (514) 457-3883

#### HEALTH SCIENTIST ADMINISTRATOR (HSA), GS-601-14/15

The National Institute of General Medical Sciences, NIH, is seeking a HSA as the Director, Minority Access to Research Careers Program. Closing deadline extended to 3/18/94. Information regarding qualifications and application requirements, please call (301) 594-7767. TDD Numbers (301) 594-8884.

U.S. Citizenship is required.



#### Director Institute of Plasma and Fusion Research UCLA

UCLA invites nominations and applications for the position of Director of the Institute of Plasma and Fusion Research. The Institute is an interdepartmental research unit with some 100 academic members and associates. Applicants should have:

- An outstanding scholarly research and publication record and national recognition in plasma physics and/or fusion engineering.
- Demonstrated ability for development of interdisciplinary activities in related areas and for broadening the areas of applications of plama sciences.
- The ability to interact closely with the principal funding agencies and obtain and use to maximum advantage appropriate external support for the Institute.
- A commitment to providing aggressive leadership for continued scientific growth of the Institute.
- Academic qualifications appropriate to the rank of full professor.
- The ability to adminster budetary, personnel, and related processes fairly and efficiently.

Salary will be commensurate with background and experience. Starting date is September 1, 1994 or soon thereafter.

To be assured of full consideration, nominations and applications should be sent by April 30, 1994

IPFR Director Search Committee c/o Ms. Rene Dennis Office of the Chancellor University of California 405 Hilgard Avenue Los Angeles, California 90024-1405

UCLA is an Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATE** in Neurobiology: Must be familiar with basic electrophysiology, experience in patch clamping lingual epithelial cells and trigemonal neurons. Applicant must hold Ph.D. in Physiology and Medicine, knowledge of microsurgery, culturing cells, computer operation and analyzing data. 40 hours per week, 8:00 to 5:00, salary \$25,000 per year. Will not discriminate on the basis of age, sex or place of natural origin. Interested applicants should apply to the nearest Job Service office or submit résumé to: Job Service, 1105 Briggs Avenue, Durham, NC 27703. Job Order # NC 3032073, DOT Code: 090.227-010. Applicant must state Social Security Number on résumé or application. If not U.S. citizen please state basis for work authorization.

#### RESEARCH ASSOCIATES-STRUCTURAL BIOLOGY

The Center for Advanced Research in Biotechnology (CARB) has periodic openings for postdoctoral research associates with strong interests in protein structure and function. Qualified applicants working in the areas of macromolecular crystallography, high-field NMR spectroscopy, computational chemistry and modeling, structural immunology, protein folding, physical biochemistry, enzymology, and molecular biology are invited to apply.

CARB is a research center of the University of Maryland Biotechnology Institute and the National Institutes of Standards and Technology devoted to fundamental problems of macromolecular structure, function, and engineering. Interested candidates should submit curriculum vitae, brief narrative summary of research experience, and approximate date of availability to:

Assistant Director Center for Advanced Research in Biotechnology 9600 Gudelsky Drive Rockville, MD 20850

Applications will be reviewed as positions become available in specific research areas.

CARB is an Equal Opportunity/ Affirmative Action Employer.

NEUROSCIENTIST/NEUROPATHOLOGIST: The New York Hospital-Cornell Medical Center Department of Pathology is searching for a neuroscientist (M.D. or M.D./Ph.D.) who is Board certified or Board eligible in neuropathology. The individual would be expected to develop an independent basic science research program capable of generating external funding. Other responsibilities would include participation in the diagnostic neuropathology service and in the teaching of residents and medical and graduate students. Financial support is available to help establish new research programs. Strong programs in neurology and neuroscience at the institutions of neighboring Rockefeller University and Memorial Sloan-Kettering Cancer Center offer outstanding opportunities for collaboration. Academic rank and salary will be commensurate with experience and scholarly accomplishments. Interested candidates should submit curriculum vitae and the names of three references to: Dr. Daniel M. Knowles, Professor and Chairman, Department of Pathology, The New York Hospital-Cornell Medical Center, 525 East 68th Street, New York, NY 10021. Cornell University Medical College is an Affirmative Action/ Equal Opportunity Employer.

#### PLANT TAXONOMIST

Brooklyn Botanic Garden seeks a plant taxonomist to work on the New York Metropolitan Flora. Ph.D. in Plant Taxonomy, or equivalent experience required with demonstrated ability to write keys and descriptions. Preference given to candidates with knowledge of the plants in northeastern North America. Ability to work with others and a desire to write floras essential. Time available to pursue own research interests. Review begins 15 April 1994. Send résumé, statement of research interests, list of three references to: Director of Personel, Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, NY 11225. Equal Opportunity Employer, M/F/V/D.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

# knock, knock.

#### (That's opportunity knocking.)

Open the door to your new career possibilities by reviewing the special section in the 11 March Women in Science issue. Inside, you'll find information about exciting open positions from pharmaceutical and biotechnology companies as well as leading scientific and medical institutions. The key to a rewarding future is knowing when opportunity knocks. Every week SCIENCE gives you the chance to review intriguing open positions from all around the world in our weekly recruitment advertising section and in our special sections, such as Women in Science and Biotechnology/ Pharmaceutical Careers. Unlock your career potential by

reading SCIENCE. Sometimes opportunity knocks just once.



# Sciences Editor

Science, the world's leading weekly science magazine, is seeking a biological sciences editor for its expanding Europe Office.

Responsibilities include assessing submitted manuscripts with other members of editorial staff; editing manuscripts for clarity; communicating with authors, reviewers, and staff with regard to manuscripts; and other publishing activities.

Candidates should have a Ph.D. plus postdoctoral experience. Editorial experience is helpful.

Please send resume and a list of publications with cover letter to:

Richard B. Gallagher, Senior Editor Science Europe Office Thomas House 14 George IV Street Cambridge, UK CB2 1HH Fax: (44) 223-302-068

#### Chair, Department of Virology and Immunology



Applications and nominations are invited for the position of Chair, Department of Virology & Immunology, Southwest Foundation for Biomedical Research. The Department has 10 faculty level members with research programs focusing on hepatitis viruses, human and simian immunodeficiency viruses, and herpesviruses, and efforts in molecular biology, immunology and cell biology. Major strengths also include the utilization of nonhuman primate models for human infectious diseases, a strong postdoctoral training program and a close relationship with the University of Texas Health Science Center at San Antonio, including a role in graduate training. The successful candidate will be expected to maintain an active research program supported in part by extramural funding. In addition, the successful candidate will have a Ph.D. or M.D. degree, a strong administrative background, and ability to provide dynamic leadership. Applications should include a curriculum vitae, a list of grant support, a description of research interests and plans, and the names of three (3) references. Nominations should include a summary of the nominee's research, administrative accomplishments, and other qualifications. Materials should be mailed to:

Dr. John L. VandeBerg Chair, Virology & Immunology Search Committee c/o Mike Moore, Personnel Manager (407-A) Southwest Foundation for Biomedical Research P.O. Box 28147, San Antonio, Texas 78228-0147

Equal Opportunity Employer M/F

## Scientist Opportunities

Science is at the heart of Hewlett-Packard Laboratories. Our investment in R&D is one of the highest among American electronics firms. This makes HP Labs one of the best environments for you to pursue long-range research. Currently, we have the following two openings for Scientists directed towards novel biomeasurement instrumentation.

• In this position, you will apply state-of-the-art analytical methods for the characterization of biological macromolecules. These methods should include capillary HPLC, electrophoresis and mass spectrometry. Requires a BS degree, PhD strongly preferred, and at least 5 years' experience in biotechnology or a closely related field. Protein, antigen-antibody, peptide-receptor and carbohydrate chemistry backgrounds and FDA experience desirable.

• Opportunity exists for a Nucleic Acid Chemist who will contribute to an interdisciplinary team developing bioanalytical instrumentation. Requires a PhD with a minimum of 5 years' experience in diagnostics biotechnology or a related field, as well as broad experience in macromolecular synthesis, sequencing, hybridization, labeling methods and characterization. In addition, experience in the following areas is desirable: molecular biology, cellular physiology, immunology, molecular immunology, clinical immunology, PCR amplification, DNA diagnostics, DNA synthesis, optics and biophysics.

Located in Palo Alto, the heart of Silicon Valley, HP Labs is just one hour south of San Francisco and adjacent to Stanford University. The area offers a wealth of recreational and cultural activities to suit every lifestyle.

Hewlett-Packard Company offers a competitive salary and benefits package. For immediate consideration, please send your resume to: Hewlett-Packard Company, Attn: Staffing Programs, Ad #0406, 1501 N. Page Mill Road, MS:3L-12, P.O. Box 10490, Palo Alto, CA 94303-9840. Hewlett-Packard Company is an equal opportunity/affirmative action employer.



POSTDOCTORAL RESEARCH FELLOWSHIP available at the University of Pennsylvania to work on molecular aspects of mercury immunotoxicity. Appli-cants should have a Ph.D. and a background in molecular cants should have a Ph.D. and a background in molecular biology, biochemistry, immunology or toxicology. Posi-tion is available immediately. Please contact: Arlene Mand at 215-573-3164 or FAX to 215-898-0964 or send curriculum vitae to: The Institute for Environ-mental Studies, University of Pennsylvania, 240 South 33rd Street, 309 Hayden Hall, Philadelphia, PA 19104–6316. University of Pennsylvania is an Affir-mative Action/Equal Opportunity Employer.

#### Institute for Molecular Medicine and Genetics Medical College of Georgia

POSTDOCTORAL FELLOWSHIPS-available in the areas of signal transduction pathways in pancreatic beta cells, gastric parietal cells, adrenal glomerulosa, vascular smooth muscle, mesangial cells and keratinocytes. Specific research initiatives include the characterization of protein kinase C isozymes, lipid-dependent regulation of protein kinase activation, vesicle-associated small GTP-binding prokinase activation, vesicle-associated small G1P-binding pro-teins, calmodulin-dependent protein kinase activation, regu-lation of cyclic nucleotide-dependent protein kinases, TGF alpha secretion and action, molecular regulation of cellular adhesion, intracellular  $Ca^{2+}$  measurement using video mi-croscopy and confocal microscopy, functional characteriza-tion of DNA-dependent protein kinases, regulation of MAP kinase during signal transduction, molecular and functional characterization of calcium channels.

cnaracterization of calcium channels. Faculty: H. Rasmussen, M.D., Ph.D.; J. Hardin, M.D.; J. R. Goldenring, M.D., Ph.D.; R. Cameron, Ph.D.; C. Wei, Ph.D.; W. Bollag, Ph.D.; D. Throck-morton, M.D.; C. Chew, Ph.D.; C. Isales, M.D.; R. Calle, M.D.; C. Brophy, M.D.; R. Bollag, Ph.D.; Y. Takeda, M.D.

Address inquiries to: H. Rasmussen, M.D., Ph.D., Medical College of Georgia, Institute for Molecular Medicine and Genetics, Augusta, GA 30912-3175. FAX: 706/721-7915.

#### FOREST ECOLOGIST

Will coordinate ongoing research and initiate new projects in the NYBG Forest, supervise NYBG Forest Manager and work with staff to develop interpretive programs. Ph.D. in relevant field required as well as experience in vegetation analysis, especially with north-eastern U.S. forest ecosystems, and the ability to identify vascular plants of the region. Excellent benefits including 4 weeks of vacation. Send curriculum vitae and letter of interest to: Personnel Manager-FE, The New York Botanical Garden, 200th Street & Southern Boule-vard, Bronx, NY 10458–5126. Affirmative Action/ Equal Opportunity Employer/M/F/D/V.

NEUROPHYSIOLOGIST. POSTDOCTORAL ASSOCIATE/RESEARCH ASSOCIATE. Integrative neurophysiologist for multidisciplinary investiga-tions on cerebellar/brainstem regulation of autonomic function, gene expression, and neuroprotection. Experience in electrophysiology, pathway neuroanatomy, and/ or neuropharmacology. Please send curriculum vitae and bibliography to: Donald J. Reis, M.D., Division of Neurobiology, Cornell University Medical College, 411 East 69th Street—KB410, New York, NY 10021. Equal Opportunity Employer/Affirmative Action/ M/F/D/V.

**RESEARCH ASSOCIATE**. A non-tenure-track position to maintain and operate sequential ICP instrumen-tation and to assist the Director in nutritional, environmental and research analyses. Familiarity with GLP regulations and strong oral and written communications considered valuable assets. M.S. in analytical chemistry, chemistry, biochemistry or equivalent, is a minimum, with extensive analytical experience to include ICP, GLC and HPLC. Salary range is \$25,000 to \$30,000 annually. Interested applicants please send a cover letter, résumé and three letters of reference to: Dr. Thomas Mawhin-ney, Director, Experiment Station Chemical Labora-tories, College of Agriculture, Food & Natural Re-courses Poom 4. Acrimeters Building University of sources, Room 4, Agriculture Building, University of Missouri, Columbia, MO 65211. The search will con-tinue until position is filled. Females and minorities are encouraged to apply. The University of Missouri is an Equal Employment Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

#### POSTDOCTORAL RESEARCH ASSOCIATE

COMPUTATIONAL BIOLOGIST: Seeking individual with Ph.D. in biological sciences, applied math or related discipline to develop algorithms and software as a member of the Washington University Genome Sequencing Center involved with the Human Genome Project. Unix, C and X experience desired. Molecular biology and genetics knowledge a plus. Send curriculum vitae and names of three references to: Paula Kassos, Genome Sequencing Center, Box 8501, Washington University School of Medicine, 4444 Forest Park Parkway, St. Louis, MO 63108. Washington University is an Affirmative Action/Equal Opportunity Employer.

#### **RESEARCH ASSOCIATE**

Position available immediately for a Master. Doctorate or postdoctoral candidate to study regulation of gene expression in mouse testis. Prospective candidates must have extensive experience in recombinant DNA technology including cDNA library construction, Northern and Southern analysis, PCR analysis, DNA sequencing, foot-printing and gel retardation assays. Some experience with transgenic analysis is desirable but not necessary. This is a fully funded position at the Morehouse School of Medicine and offers a competitive salary and benefits, excellent research facilities and an ideal environment for career development. Please forward curriculum vitae and names of three references before April 30, 1994, to: Dr. Kelwyn Thomas, Department of Anatomy, More-house School of Medicine, Atlanta, GA 30310–1495. FAX: 404-752-8443.

**RESEARCH ASSOCIATE** to conduct research on steroid regulation of gene expression; identify and characterize neurotrophic factors synthesized by neural cells, in cell lines, and in brain primary cultures at different stages in development; use molecular biological techniques including polymerase chain reaction and cloning techniques, RNA isolation and Northern analysis, Western analysis, in situ hybridization, immunohistochemical studies, microscopy and extensive tissue culture with cell lines, and primary mouse brain cultures; keep records and prepare reports on research for conferences and publication in professional journals. Requires Ph.D. in Biology, Biochemistry, or Molecular Biology; research experience in steroid hormone regulation of gene expres-sion; experience in molecular biology techniques, includ-ing tissue culture in cell lines and primaries, steroid-receptor binding assays, metabolic labeling and immunoprecipitations, two-dimensional gel electrophoresis, cDNA cloning, PCR, and blot hybridization.

\$31,200 per year; Job location/interview: Los Ange les, California. Send this ad and resume to: Job #HR46094, P.O. Box 269065, Sacramento, CA 95826–9065.

FLUORINE CHEMIST: Research and develop ment of new fluorine chemical products; Develop and improve manufacturing processes for fluorine chemical products, including improvement of the life of the cata-lyst used in the process and to develop an azeotropic breaker to decrease the waste generated in manufacturing; Develop manufacturing process for proprietary fluorine chemical products without use of water; Develnuorine chemical products without use of water; Devel-op new technology for the separation of proprietary fluorine products from hydrogen fluoride during the manufacturing process; Design and develop complete destruction technology of Chlorofluorocarbons (CFC) destruction technology of Chloronuorocarbons (CFC) and conduct other research and development work in the phasing out of CFC's in fire suppressant chemicals. Job location: Rural Arkansas. **MINIMUM REQUIRE-MENTS**: Must have M.S. in (Fluorine-based) Chemis-try and Bachelor's degree or equivalent in Chemical Engineering. Two years of experience in research and development of Austria. development of fluorine chemistry. Experience must include one year of pilot plant operating experience and laboratory bench research with fluorine chemicals and two years of experience in monitoring automatic processes using hydrogen fluoride at least at pilot plant scale and gas phase fluorination reaction technology. Experi-ences may have been concurrent. *Must have proof of legal authority to work in the United States*. **TERMS**: \$43,000 per year. To apply, send résumé with copy of ad to: Arkansas Employment Security Department, P.O. Box 2038, El Dorado, AR 71730; JO#744050.

#### **POSITIONS OPEN**

#### BIOCHEMIST

Small, 6-year-old biotech firm in Seattle is seeking a Ph.D. with 5 to 10 years of experience in lipids, eicosanoids, and cytokines to join an R&D program to isolate bioactive compounds from algae and assess their efficacy, safety, and mode of action. Organic synthesis and analysis is a plus. Please send curriculum vitae to: Biochemist, 13265 89th Avenue South, Renton, WA 98055.

#### **RESEARCH BIOPHYSICIST** Laboratory of Structural Biology Division of Computer Research and Technology National Institutes of Health Bethesda, Maryland

Position available for a Research Biophysicist respon-sible for planning and conducting multidisciplinary ap-plied and theoretical research in the field of membranes transport.

Candidates must have a Ph.D. or an equivalent doctoral degree, completed postdoctoral training, and work experience that demonstrates independent research in mesoscopic ion channels and their gating, channel hydra-tion, theory of fluctuation analysis and its application to ion channel conductance "noise." Salary: \$49,420 to \$54,941.

Qualified candidates should send curriculum vitae and/ or SF-171 to:

Adrian Parsegian, Ph.D. NIH/DCRT Building 12A/2041 9000 Rockville Pike Bethesda, MD 20892

Applications must be received by March 31, 1994. NIH is an Equal Opportunity Employer. U.S. citizenship required.

#### **PRODUCTION CHEMIST**

B.S. or M.S. in Chemistry or Biochemistry and strong background in organic synthesis including ability to conduct multi-step synthetic sequences and chromatographic purifications. Protein purification experience highly preferred. Résumé with salary requirements: Di-rector, Human Resources, Code PC, 10394 Pacific Center Court, San Diego, CA 92121. (Relocation assistance not available for this position.)

CALBIOCHEM-NOVABIOCHEM CORP.



The San Diego Regional Cancer Center (SDRCC), an affiliate of Sharp HealthCare, is a not-for-profit biomed-ical research center located in La Jolla. SDRCC is dedicated to the development of biologically based treat-ments for cancer and other diseases involving both basic and clinical research.

and clinical research. SDRCC is expanding its staff at all levels in basic research programs dealing with immunology and au-toimmunity, cellular, developmental and molecular biol-ogy. Successful candidates are expected to maintain externally fundable, independent research programs in these disciplines and to be intellectually involved in the andication of basic concents and strutegies for effective application of basic concepts and strategies for effective immunotherapy and gene therapy for cancer.

SDRCC provides ample space and resources, includ-ing patient material for clinical studies, and the latest biotechnology support facilities. We offer a competitive

biotechnology support facilities. We offer a competitive salary and an excellent benefits package. Please respond with: résumé, bibliography, statement of research interest, funding history, and names of three references to: Dr. Ivor Royston, President, or Dr. Darcy Wilson, Director of Basic Sciences, San Diego Regional Cancer Center, 3099 Science Park Road, Suite 200, San Diego, CA 92121. Equal Opportunity Employer.

## **ESA ASTRONOMERS**

The Space Telescope Science Institute (STScI) expects to have openings for astronomers. Excellence in research is the primary qualification for these positions. The level of the appointments will be determined by the experience and accomplishments of the successful applicants. ESA astronomers at STScI spend about 50% of their time in personal research and the remainder in support of the science mission of the Hubble Space Telescope. There is some latitude within this framework to tailor the functional component of the positions to the interests and expertise of the successful applicants.

STScl supports the research of its scientific staff through visitor, postdoctoral, and graduate-student programs. Several workshops and symposia are held each year at the Institute. Internal funds are available for computing and other equipment.

Candidates for these positions must be nationals of ESA member states and must have a PhD or equivalent degree in Astronomy, Physics, or Planetary Science and some postdoctoral experience. Candidates should send a curriculum vitae and bibliography, a brief statement of research and functional interests, and the names of four references to Dr. D. Macchetto, European Space Agency, Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, Maryland 21218. Applications will be accepted until May 30, 1994. EEO/AA/M/F/D/V.



Protein Design Labs (PDL) is a next-generation biotechnology company which uses computer modeling and genetic engineering to develop novel, therapeutic proteins for the treatment of human disease. Join us in the following San Francisco Bay Area opportunities.

#### Scientist - Cell Culture

Utilize your media formulation and cell culture expertise as you lead all cell culture operations and activities including cell line amplification, culture media optimization, bioreactor operation, and preparation of research materials. Qualified candidate will have a PhD in Cell Biology/ Microbiology with at least 5 years' relevant industrial experience or a BS/MS and 8+ years' experience. A solid background in bench scale bioreactor operation is required, as is computer literacy. Experience with monoclonal antibody cell culture process is desired.

#### Staff Scientist - Preclinical

You will assume responsibility for animal model development to evaluate efficacy and mechanism of action of humanized monoclonal antibodies directed against viral, cancer and adhesion molecule targets. Of key importance is your background in model development including surgical skills, ELISA assays, FACS analysis and other in vitro skills in support of in vivo studies. Along with a PhD in Immunology, Virology, Pharmacology or equivalent, you need 3-5+ years' postdoctoral experience plus at least 3-5 years' academic/industry expertise. Your skill set should also include strong communication and presentation abilities, as well as a background in pharmacokinetics, safety evaluation and project team participation.

We offer a pleasant working environment and professional challenge and growth. Please send your resume, indicating position desired, to

Human Resources, 2375 Garcia Ave., Box SCI, Mountain View, CA 94043. FAX (415) 903-3730. EQE



## NAC-CNAC

NRC is Canada's principal science and engineering organization. We work with industry partners to improve Canada's competitiveness. Currently, the **Institute for Biological Sciences (IBS)** is looking for an energetic person who will provide the leadership required to further enhance our record of excellence.

## **Research Officer**

#### Ottawa, Ontario

#### Your Challenge

Within the Cellular Neurobiology Group, you will develop and carry out advanced research in specified aspects of neurobiology. You will be responsible for leading and participating in research projects related to cell signalling in normal and abnormal cell physiology and pathology.

#### **Your Credentials**

PhD in either neurobiology, neurochemistry, neuropharmacology or related disciplines. Expertise in the use of molecular/biochemical approaches to study signal transduction mechanisms. Expertise in the use of animal and/ or cultured cell models to study the role of cell-signalling pathways in neurologically related diseases. An internationally competitive track record in neurological research. Preference will be given to individuals with an established research program of demonstrated interest to the pharmaceutical/diagnostic industrial sectors. In accordance with Canadian immigration policies, preference will be given to Canadian citizens and permanent residents of Canada. A security screening will be required.

Salary Range: Commensurate with qualifications.

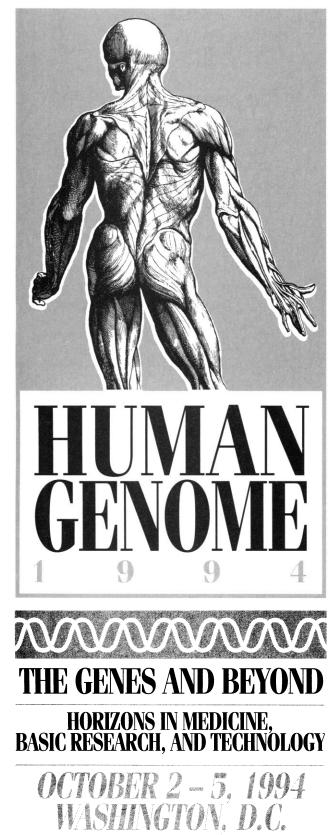
To explore this opportunity, send your resume before April 1, 1994, indicating reference number BS-93-15-SC, to: The Recruitment and Staffing Section, National Research Council Canada, Ottawa, Ontario K1A OR6.

NRC is an equal opportunity employer. Vous pouvez obtenir ces renseignements en français.

National Research Consell national Council Canada de recherches Canada

Canadä

# SCIENCE and HUGO Present



*Science* magazine and The Human Genome Organization (HUGO) are pleased to sponsor the most comprehensive update on the genome project.

Speakers include:

- **Donna Shalala** U.S. Department of Health and Human Services
- Harold Varmus National Institutes of Health
- C. Thomas Caskey HUGO
- **Daniel Cohen** C.E.P.H., France
- Francis Collins National Center for Human Genome Research
- Shirley Tilghman Princeton University
- Lloyd Smith University of Wisconsin
- **Tadatsugu Taniguchi** Osaka University, Japan
- Peter Gruss
   Max Planck Institute, Germany
- Maynard Olson
   University of Washington
- Alan Hall MRC, United Kingdom
- **Gerald Rubin** University of California
- Harold Weintraub
   Fred Hutchinson Cancer Research Center

	nan Genome 1994 info toda Lin:	
Name		
Organization		
Address		
City		
	Zip	
Phone		
Fax		
Mail or fax to: Glo	al Trade Productions, Inc., 5203 Leesburg Pike, ls Church, VA 22041. Fax (703) 671-7695.	

Call (703) 671-1400 today or send in the coupon for more information.





RJR — LEON GOLBERG MEMORIAL FELLOWSHIPS Postdoctoral Training Opportunities in Pharmacology and Toxicology

Bowman Gray School of Medicine (BGSM) of Wake Forest University and RJ Reynolds Tobacco Company (RJR) have established training fellowships honoring the eminent toxicologist, the late Dr. Leon Golberg. A faculty of over 50 members represents a wide variety of disciplines including pharmacology, chemistry, biochemistry, cell biology, metabolism, molecular biology, neuroscience and behavioral pharmacology. A competitive stipend will be offered. Fellows will have the opportunity to spend at least 2 years at BGSM or RJR under the guidance of one faculty member, and to interact extensively with other faculty. Interested individuals should send a C.V., a description of their current research project, and the names and addresses of three references to:

> Jack W. Strandhoy, Ph.D. Dept. of Physiology & Pharmacology Bowman Gray School of Medicine Wake Forest University Winston-Salem NC 27157-1083

BGSM is an Equal Opportunity/Affirmative Action Employer

#### UNIVERSITY OF MINNESOTA DEAN MEDICAL SCHOOL

Applications and nominations are invited for the full-time position of Dean with tenured faculty rank at the University of Minnesota Medical School. The School is one of seven schools in the University's Health Sciences Center, with nearly 900 faculty in its 23 clinical and basic science departments, and three centers with annual expenditures of \$300 million. Currently about 900 students are enrolled in M.D. or combined M.D./Ph.D. programs in addition to 1,400 residents and fellows in specialty programs, 260 graduate students pursuing masters or doctoral degrees in research areas, and 300 undergraduate students in the allied health professions.

#### **Responsibilities**

The Dean is the chief executive officer of the Medical School and, as such, has overall responsibility for maintaining and improving the stature of the School and is accountable for the conduct and outcome of the School's programs and activities. The 23 departments in the Medical School report directly to the Dean, and the Dean reports to the Provost of the Health Sciences and participates with other deans in policy formation and strategic planning for the Health Sciences and the University. The Dean represents the Medical School within the University and to external constituencies, and provides leadership that will strengthen the School in fulfilling its missions of educational, research, public service and outreach.

#### **Qualifications**

Essential qualifications include an M.D., Ph.D., M.D./Ph.D., or foreign equivalent; evidence of scholarly achievement, and the ability to successfully manage large organizations and administer programs in patient care and service, medical education and research. Candidates should have administrative and fiscal experience in medical affairs; demonstrable commitment to increased diversity; an understanding of the role and responsibilities of a land grant institution; and communication and interpersonal skills to create an organizational culture that promotes excellence and accountability. A management style of participatory leadership is highly desirable.

Nominations and/or applications should be forwarded by March 31, 1994 to:

Ashley Haase, M.D. Chair, Search Committee c/o Susan Jackson Box 293 UMHC 420 Delaware Street, S.E. Minneapolis, MN 55455

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

DEAN, SCHOOL OF SCIENCES AND NATURAL RESOURCES: Lake Superior State University, a public, four-year university in Michigan's Eastern Upper Peninsula, invites candidates for the position of Dean for the School of Sciences and Natural Resources. The School is comprised of twenty-one faculty members in the disciplines of biology, chemistry, geology, physics, and environmental science. As a chief academic officer of the University, the Dean reports directly to the Provost, is the primary administrator of the School for academic, faculty and curricular concerns, and represents the School in the broader academic community.

The successful candidate must have an earned doctorate, tenure in an academic discipline, senior academic rank, an outstanding record of teaching and scholarship, and administrative experience at the departmental level or above. Salary is competitive with excellent fringe benefits.

Lake Superior State University is a comprehensive University with a focus on teaching and the personal educational environment which can be obtained with a student enrollment of 3,500. Its beautiful location overlooking the famous Soo Locks on the St. Mary's River between Lakes Superior and Huron and the Canadian border provides unique programmatic opportunities. Over 75 baccalaureate and associate degree programs are offered as well as an MBA.

The search committee will begin reviewing applications in late March and will continue until the time of selection. Candidates should submit a letter of interest in the position; curriculum vitae; the names, addresses, and telephone numbers of at least five references and letters of reference from at least three of these. The Dean will assume office July 1, 1994 or as soon after as possible.

Nominations and expression of interest should be submitted to:

Office of Employee Relations Administration Building ATTN: Dean Search Committee Dr. John Lehman, Chairperson Lake Superior State University Sault Ste. Marie, MI 49783

An Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

#### AGRICULTURAL BIOTECHNOLOGY POSITIONS

Northrup King Co., a Sandoz Seeds Company and a leader in applying new technologies to the improvement of field crops for world agriculture, seeks innovative scientists for our Stanton, MN research center located 50 miles south of Minneapolis/St. Paul. The successful candidates will join multidisciplinary teams developing novel solutions to the economic and environmental challenges faced by growers around the world.

#### SR. SCIENTIST- MOLECULAR BIOLOGY

A position is available for a Ph.D. level candidate with postdoctoral experience to join a team charged with identifying and developing novel genes for control of agronomic pests. Experience in protein biochemistry including expression and purification required. Experience with gene isolation, cloning techniques and plant gene expression desired.

#### ASSISTANT/ASSOCIATE SCIENTISTS -MOLECULAR BIOLOGY

Career opportunities are available for scientists interested in agricultural biotechnology. A BS or MS in biochemistry, molecular biology or related field is required. Candidates should be familiar with a range of molecular techniques including cloning, PCR, Southern, Western and Northern blots, and ELISA assays. Prior experience with transgenic plants, plant pathology or entomology would be desirable.

Northrup King offers acompetitive salary and benefits program. Please forward cover letter, resume and a list of three references to: Search Committee, Northrup King Co., 317 330th Street, Stanton, MN 55018-4300 (Fax 507-645-7519.



ECOLOGIST: One-year sabbatical replacement teaching position beginning fall 1994 with a possibility of a second year. Teaching responsibilities include a non-major environmental elective, population and envi-ronmental biology for majors, ecology, and upper-divi-sion elective of choice. Ph.D. and teaching experience required. Submit curriculum vitae, statement of teaching philosophy, transcripts, and three letters of reference by March 28, 1994, to: Dr. Eric Yensen, Chair, Biology Department, Albertson College of Idaho, Caldwell, ID 83605. Women and minorities encouraged to apply.

ENVIRONMENTAL TOXICOLOGIST for Manufacturer in the Cincinnati area.

Assist the company in the development and implementation of new methods for assessing the biodegradability and compostability of xenobiotic materials. Represent the company on technical working groups within industry to develop and implement compostability assessment strategies. Establish a technical review of current forestry practices in North America. Assist the company and industry working groups in external communication of forestry facts. Develop environmental safety assessments for company paper products, product ingredients and manufacturing process aids. Along with other company toxicologists, communicate environmental risk assess-ments within the company and externally to appropriate industry groups. Ph.D. in Soil Science required plus one year of experience in job offered or one year of experience as a pre- or postdoctoral researcher in soil microbiology, biochemistry and chemistry. One year of experience must involve development and use of methods to monitor plant-soil-microbe interactions; and, methods to evaluate toxicity in terrestrial ecosystems.

40 hours per week, 8:00 to 4:30. Salary \$56,000 per year. Must have proof of legal authority to work indefinitely in the United States. Send résumé in duplicate (no calls) to: J. Davies, JO#1230934, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

#### **VETERINARY VACCINES/BIOTECHNOLOGY** UNITED STATES DEPARTMENT OF AGRICULTURE

Veterinary Biologics, Biotechnology Section, Animal and Plant Health Inspection Service, is seeking applicants for two Ph.D.-level scientific positions. Duties include: the review of license applications for veterinary vaccines; risk assessments for recombinant vaccines; and the development of policy for licensing recombinant vaccines, immunomodulators, and molecular diagnostic kits. Salary commensurate with experience (range GS-12 to GS-14, \$42,003 to \$76,733). Send curriculum vitae and a list of three references to: Cyril G. Gay, D.V.M., Ph.D., Chief Staff Veterinarian, USDA, APHIS, Biotechnology, Biologics, and Environmental Protection tion, Veterinary Biologics, 6505 Belcrest Road, Fed-eral Building, Room 838, Hyattsville, MD 20782. Telephone: (301) 436-8674; FAX: (301) 436-5992. U.S. citizenship is required. Application forms will be sent when position is announced. USDA is an Equal Opportunity Employer.

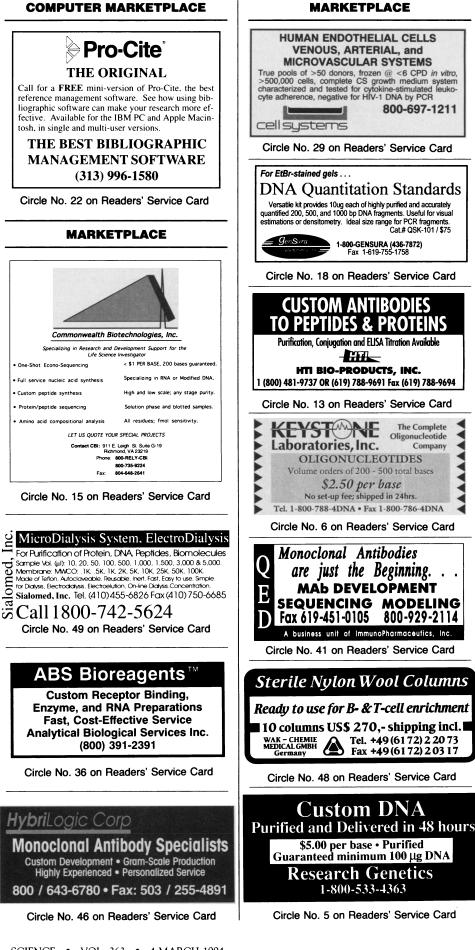
#### **ANNOUNCEMENTS**

The Department of General Biology, School of Medicine, University of Liège, needs urgently deuterated standarts— ${}^{2}H_{4}$ -TXB<sub>2</sub> and/or  ${}^{2}H_{4}$ -2,3-dinor-TXB<sub>2</sub>

(less than 100  $\mu$ g). If you can sell us these products, please contact Telephone: 32/41/56.25.69; FAX: 32/41/56.29.36. Address: Department of General Biology, University of Liège, Tower of Pathology (B23), Sart-Tilman, B-4000 Liège, Belgium.

#### MEETINGS

THIRD BERKSHIRE NEUROSCIENCE SYM-POSIUM: Genetic Aspects of Neurodegenerative Disease. Jiminy Peak Conference Center, Hancock, Massachusetts. June 20–22, 1994. Speakers include M. Flint Beal, Robert Lazzarini, Martin Chalfie, Pierluigi Gambetti, Robert Brown, Gerald Shellenberg, Jeffrey Rothstein, William Nicklas, Michael Johnston, John Shoffner and others. Contact: Nan Donnelly or Richard Henneberry at the Conte Institute for Environmental Health. Telephone: (413) 499-6100; FAX: (413) 443-1740.



1-800-533-4363 Circle No. 5 on Readers' Service Card

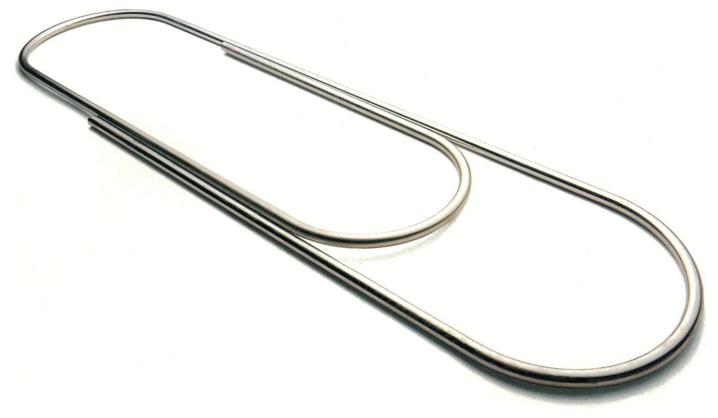
800-697-1211

The Complete

Company

Oligonucleotide

SCIENCE • VOL. 263 • 4 MARCH 1994



## Few things are easier to use than the new SORVALL® ULTRA PRO<sup>™</sup> 80.



Simply put, the new SORVALL® ULTRA PRO™ 80 is the quickest, easiest ultracentrifuge available today. That's because it was designed with the

help of ultracentrifuge users such as yourself. Thanks to QUIKset<sup>™</sup> user interface, all you need to do for most runs is simply set speed, time, and temperature, then press start. And with our built-in memory, you can save 30 programs and Manufactured under an ISO 9000 quality system approved by BSI and UL. easily recall them when needed. What's more, the ULTRA PRO 80 offers a built-in three-step run. Audible run status system. Imbalance detector. SOFTspin<sup>™</sup> rotor control. Auto restart. RCF and ω<sup>2</sup>dt integrator modes. And it even accepts Beckman Ultra rotors. For more information on the new SORVALL ULTRA PRO 80, call 1-800-551-2121. And get a hold of the easiest ultracentrifuge around.

SORVALL...a better choice.



Circle No. 38 on Readers' Service Card



## is on Windows . . . and has been since 1991!

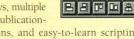
If your favorite "technical publication and presentation" software has only just become available for Windows, you aren't using ORIGIN. ORIGIN was the first technical graphics software for the Windows environment, and is ideally suited to meet the needs of the research scientist and engineer. While others play catch-up, ORIGIN continues to move forward.



The recently-released Version 3.0 includes enhancements that further define ORIGIN's uniqueness. The new curve fitting tool bar, for example, offers users a quick and easy way to set fitting constraints and generate confidence

bands for the fit curve. The new Object Edit tool bar allows users to select multiple objects by dragging a "rubber band" and aligning them with a single click.

These new features, in combination with ORIGIN's multiple plot windows, multiple graph layers, wide variety of publication-



Object Edit

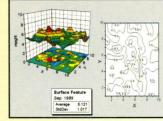
quality graphic output options, and easy-to-learn scripting language, LabTalk, result in the most flexible and sophisticated software package of its kind.

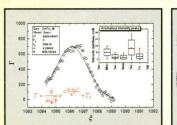
> The optional Data Acquisition and User Interface Modules provide ORIGIN users with the unique ability to collect, monitor, and control data from within a powerful plotting and data analysis package — another revolutionary approach moving ORIGIN from the desktop to the laboratory.

ORIGIN is your *complete* laboratory data management solution, providing unrivaled technical graphics, data analysis, system control, and data acquisition capabilities. Why upgrade with

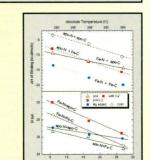
untested software when you can enhance your capabilities *beyond* simple plotting with ORIGIN?

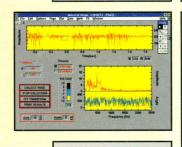


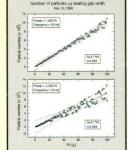


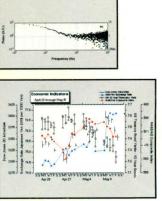


Data3 Data3 Data1 matrix.01 Data1









and enhance

Version 3

100 CM

Center All Center COS Viezh 1.00

## Call Toll-Free 1-800-969-7720 for a Free Demo

MicroCal Software, Inc., One Roundhouse Plaza, Northampton, MA 01060 Tel: 413-586-2013 • Fax: 413-585-0126