

Artificial Capillary Module

CELLMAX is an artificial capillary module designed for the culture and study of endothelial cells. Endothelial cells are cultured on the inner luminal surface of the unit's specially modified polypropylene capillary fibers. Unlike cone plate, parallel plate, or glass capillary perfusion methods, the system provides endothelial cells with long-term growth conditions that mimic the fluid flow, shear stress, and cell-cell contact characteristic of endothelial cells in vivo. The module is used with the CELLMAX QUAD Artificial Capillary Cell Culture System and comes with detailed instructions including recommendations on seeding density, media requirements, feeding schedules, and perfusion rates. Cellco Inc. **Circle 88.**

DNA Sequencer

The A.L.F. DNA Sequencer, together with Fragment Manager software, is a fast and reliable tool for size determination and quantitation of DNA fragments using fluorescent labeling (which eliminates the handling of hazardous radioactive materials). Fragment Manager is interactive, straightforward, graphic-oriented software that allows the user to visually verify each step before proceeding. The software calculates peak size, height, and areas and identifies and compares peaks to give the user the relative and absolute values of DNA bands. The system supports almost any Windows-compatible printer or plotter. Pharmacia LKB Biotechnology. **Circle 89.**

Antibodies

Monoclonal antibody (MAb) QBEnd/10 reacts with the CD34 antigen in human endothelial and hematopoietic cells. QBEnd/10 may be a more specific method of evaluating vascularization, an important focus of tumor evaluation and prognostication. BioGenex Lab. **Circle 90.**

A MAb pair optimized for quantitation of mouse interleukin-2 (IL-2) allows investigators to assay IL-2 in an enzyme-linked immunosorbent assay, an easier method than IL-2 bioassay. Pharmingen. **Circle 91.**

A line of oncoprotein markers includes a sheep polyclonal antibody to *fos* and a rabbit polyclonal antibody to *c-erbB2* that can be used in protein immunoblotting and immunoprecipitation. Cambridge Research Biochemicals. **Circle 92.**

Polyclonal antibodies, including anti TGF- β_2 , anti TGF- β_3 , anti TGF- β_5 , and a pan-specific antibody that will detect most TGF- β variants, are all raised in goat and rabbit and are suitable for neutralization assays, enzyme-linked immunosorbent assays, and protein immunoblotting. British Biotechnology Products. **Circle 93.**

Cell Selector

The AIS MicroCELLector, a device that isolates cells as well as being a flow cytometer, has two new accessories to speed up the cell selection process. One accessory holds the MicroCELLector in a standard laboratory centrifuge, reducing to minutes the time required to isolate targeted cells. Previously, cells had to settle out of suspension in order to bind to the monoclonal antibody, protein ligand, or soybean agglutinin covalently bound to the polystyrene flask. As soon as the flask is removed from the cen-

trifuge, positively selected cells can be removed by a propeller-shaped, coated metal insert dropped into the flask and spun by a magnetic stir plate, replacing a culture process of up to 72 hours. Applied Immune Sciences. **Circle 94.**

Automated Oligonucleotide System

The OP120 OligoPrep Oligonucleotide Deprotection System automates sample preparation of oligonucleotides. The benchtop



system automates the cleavage, deprotection, and concentration steps in synthesis protocols. It features a unique rotor that can accommodate up to 12 cap and vial assemblies. Incubation time can be programmed from 1 to 14 hours; drying time can be programmed from 1 to 8 hours. Savant Instruments. **Circle 95.**

Tensor Analysis Software

MathTensor 2.1.5 adds elementary and advanced tensor analysis functioning to Mathematica. MathTensor provides more than 250 functions and objects for computing Riemann tensors and related objects, defining new ten-

sors with a given symmetry, simplifying tensorial equations, and more. Versions are available for all computers that run Mathematica 1.2, 2.0, or greater. MathSolutions Inc. **Circle 96.**

Literature

Chart Recorder Catalog covers a line of graphic recorders and specialty printers in 24 pages. Text is in English, with German, French, Italian, and Spanish translations. Astro-Med. **Circle 97.**

System 2000 FT-IR: Applications describes the numerous applications and configurations of this Fourier transform-infrared (FT-IR) spectrometer. Designed for flexibility, the system has up to four equivalent infrared output beams, each of which can be configured with a sampling station suited to a particular application. Perkin-Elmer. **Circle 98.**

Building and Maintaining Critical Environments includes 152 pages of cleaning products, constant temperature equipment, cleanroom documentation items, filtration products, fume control equipment, furniture, cleanroom gloves and garments, quality control apparatus, mats, monitoring equipment, safety items, static control equipment, sterilization products, and wipers and swabs. VWR Scientific. **Circle 99.**

ATCC/NIH Repository Catalogue of Human and Mouse DNA Probes and Libraries: Sixth Edition, 1992 provides a directory to probes and cloned genes for human and murine loci, oligonucleotides, human chromosome-specific genomic libraries, primate and murine cDNA and genomic libraries, oncogene and transforming protein probes and clones, selected probes detecting polymorphism, bacterial hosts for transformation or plating libraries, human brain cDNA clones, and chromosome 1 mapping kit. American Type Culture Collection. **Circle 100.**

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.

CUSTOM **DNA** SYNTHESIS
PURE & SIMPLE

● **PRICE** \$ **3** per base
as low as plus setup
+

- SUPERB TECHNICAL SUPPORT
+
● IMPECCABLE QUALITY
+
● WORLD'S FASTEST SERVICE

MIDLAND

THE UNDISPUTED #1
CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY

3112-A West Cuthbert Avenue
Midland, TX 79701

PHONE 1-800-247-8766 FAX 1-915-694-2387

Circle No. 17 on Readers' Service Card

**CAREERS IN SCIENCE:
A LOOK AT THE FUTURE**
SCIENCE 18 September Reprint

A sequel to last year's "Careers in Science" issue, this 62-page special section takes an in-depth look at career opportunities in science. Is industry the new route to success for scientists in the 90's? In a detailed overview, globalization, the refocusing of R&D, and the need for versatility are among the trends examined to help answer this question.

Among the other topics explored in this special section include:

- Physics Famine: A Search for Job Stability
- The Euro Postdoc: National Barriers are Crumbling
- The Attractions of Biotech Careers Over Academia
- Career Opportunities for Environmental Scientists

To order your copy send \$1.25 per copy plus postage to:

SCIENCE	Postage (per copy)
Attn: Corinne Harris	US: \$1.50 first copy,
1333 H Street, NW	.60 each add'l copy
Washington, DC 20005	Int'l Air: \$5.00 first copy,
	\$4.00 each add'l copy
	Int'l Surface: \$1.50 first copy,
	\$1.00 each add'l copy

For information on orders of 30 or more, call (202) 326-6527. Visa and MasterCard orders accepted.

ATTOFLUOR™
REAL-TIME DIGITAL
FLUORESCENCE ANALYZER



**FASTER. SIMPLER.
MORE SOPHISTICATED.**

State-of-the-art computerized workstation ideally suited for kinetic measurements of calcium, pH, cyclic AMP and other ions.

- Zeiss AXIOVERT for exceptional fluorescence transmission.
- Highly sensitive, compact intensified CCD camera.
- Vibration-free excitation filter changer for up to four ratios per second.
- Powerful 486 class computer.

ATTOFLUOR provides effortless image acquisition, processing, archiving and data file manipulation. It's offered as an integrated turnkey system, or as individual components.

For immediate detailed information and pricing, contact Roxanne Moosher at 914-681-7653, fax 914 681-7446. Or call 800-233-2343.

Carl Zeiss, Inc.

Microscope Division
One Zeiss Drive
Thornwood, New York 10594
800-233-2343 • Fax 914-681-7446



Brightfield
Microscopy

Darkfield
Microscopy

Phase
Contrast
Microscopy

Fluorescence
Microscopy

Differential
Interference
Contrast
Microscopy

Polarizing
Microscopy

Video
Microscopy

Confocal
Microscopy

Microscope
Photometry

**SEE
WHAT
YOU'RE
MISSING**

Circle No. 33 on Readers' Service Card

Mapping the Human Brain

A special two-day seminar at AAAS⁹³, the annual meeting of the AAAS

Seminar Organizer: **Joseph B. Martin**,
Univ of Calif-San Francisco

Understanding Neurodegenerative Diseases: Alzheimer's Disease

Sunday, 14 February, 8:30 am–11:15 am

Session Chair: **Joseph B. Martin**, *Univ of Calif-San Francisco*

Joseph B. Martin, *Univ of Calif-San Francisco*

Introduction—The human brain mapping initiative

Leonard Berg, *Washington Univ School of Med*

Alzheimer's disease: The clinical and pathological syndrome

Kenneth S. Kosik, *Harvard Med School*
From the amyloid precursor protein to the plaques and tangles: Where does it go wrong?

Alison Goate, *Washington Univ School of Med*

Mutations in the amyloid precursor protein gene in Alzheimer's disease

Brad Hyman*, *Massachusetts General Hospital*

An analysis of the memory deficit in Alzheimer's disease

Donald L. Price, *Johns Hopkins Univ School of Med*

The biology of Alzheimer's disease: Lessons from studies of model systems

Keynote Address

Sunday, 14 February, 1:15 pm–2:15 pm

Eric R. Kandel, *Columbia Univ College of Physicians and Surgeons/HHMI*

Cell and molecular mechanisms of memory storage

Perceiving the World: An Exploration of the Senses

Sunday, 14 February, 2:30 pm–5:00 pm

Session Chair: **David C. Van Essen**,
Washington Univ School of Medicine

Randel Reed*, *Johns Hopkins Univ*
Genes involved in visual processing

John E. Dowling, *Harvard Univ*
Retinal processing of visual information

David C. Van Essen, *Washington Univ School of Med*
Mapping the visual cortex: From monkeys to humans

John S. Kauer, *New England Med Center/ Tufts Med School*

Distributed representation of odor information: A paradigm for parallel neuronal processing

Stephen G. Lisberger, *Univ of Calif-San Francisco*
Sensory-motor processing for smooth eye movements

Memory and Learning: Lessons from Models

Monday, 15 February, 8:30 am–11:30 am

Session Chair: **Marcus Raichle***,
Washington Univ School of Med

Larry R. Squire, *VA Medical Ctr/Univ of Calif-San Diego*
Brain systems and the structure of memory

Gary Lynch, *Univ of Calif-Irvine*
Biological origins and computational features of memory in brain networks

Marcus Raichle*, *Washington Univ School of Med*

Contributions of brain imaging to an understanding of brain areas involved in memory and learning

Endel Tulving, *Rotman Res Inst of Baycrest Center, Toronto*

How do we think about memory?

Panel discussion: Sharing the data involved in dissecting brain functions

Keynote Address

Monday, 15 February, 1:15 pm–2:15 pm

Floyd E. Bloom*, *Scripps Res Inst*
Experience with brain mapping

Mapping Strategies

Monday, 15 February, 2:30 pm–5:30 pm

Session Chairs: **Constance M. Pechura**,
Inst of Med; **Joseph B. Martin**, *Univ of Calif-San Francisco*

Robert Langridge*, *Univ of Calif-San Francisco*

Mapping molecules: Computations in time and space

Bruce R. Schatz, *Univ of Arizona*
Mapping organisms: From a worm genome to a human brain

Joseph Coyle, *Harvard Med School*
A neuroscientist's view of the brain

Vinton G. Cerf, *Corporation for National Research Initiatives*

A computer scientist's view of the brain map

Alan I. Leshner, *Natl Inst of Mental Health*
The Human Brain Project: The federal role

Panel discussion and concluding remarks

* Invited, not confirmed

American Association for the Advancement of Science

☐ **Yes!** I'd like more information about "Mapping the Human Brain" and other AAAS⁹³ events. Please send me a preliminary program and registration form.

☐ I'm interested in exhibiting. Please send me an exhibit prospectus.

Name _____

Institution _____

Address _____

City/state/zip _____

Country _____ Phone _____

Mail to: AAAS Meetings, 1333 H Street, NW, Washington, DC 20005 (Phone: 202-326-6450)

Or fax to: 202-289-4021

A08

MiniMACS™

The New Attraction in Separation Technology

MiniMACS™ is a new tool to separate animal cells, plant cells, bacteria and cell organelles from complex mixtures quickly, accurately and economically. MiniMACS uses magnetic antibodies that bind to the material of interest, which is then separated with a magnetic separation column. MiniMACS technology was developed for sensitive blood cells and now brings you an easy to use, fast and flexible separation technique.

- **MiniMACS... fast and simple**
Stain your sample with the Magnetic Antibody and run it through the magnetic column. In 10 to 15 minutes the separation is complete. Up to four separations can be run at once.
- **MicroBeads™... elegant and flexible**
The Magnetic Antibody particles are so small they typically don't affect the behavior of the material you separate. The separated material can be used in your experiment immediately. A broad line of Magnetic Antibodies support a wide range of applications.
- **MiniMACS... superior performance & value**
MiniMACS provides high purities and high specificity. It is easy-to-use and gentle on the experiment. Yet its low cost competes with other separation techniques that take many times longer and have much lower yields.



*If you're attracted to the best in
Magnetic Separation, call:*

U.S. (408) 730-6838

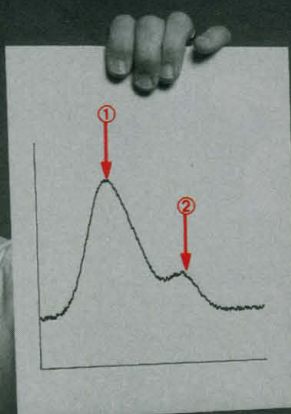
Germany (49) 02204/8096

Miltenyi Biotec

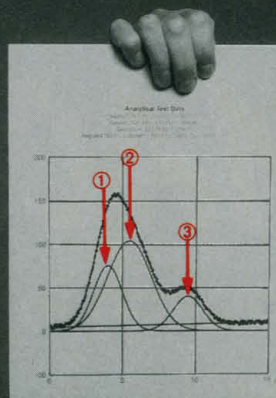
Germany • Miltenyi Biotec • Friedrich-Ebert-Straße 68 • D-5060 Bergisch Gladbach 1, Germany • ☎ 02204/8096 • FAX 02204/85197
U.S. • Miltenyi Biotec • 1250 Oakmead Park, Suite 210 • Sunnyvale, CA 94088-3599 • ☎ (408) 730-6838 • FAX (916) 888-8925

Circle No. 25 on Readers' Service Card

Dr. Smith
found
two peaks...



Using PeakFit™,
Dr. Jones found
three peaks...



Guess who got the grant?

Because PeakFit™ uses sophisticated non-linear curve fitting techniques, it is far more effective than other data analysis tools in reducing noise and separating unresolved peaks! In fact, PeakFit is one of the most powerful software packages available today for chromatography and spectroscopy data analysis. For chromatographers, PeakFit extracts important system suitability information such as peak areas, asymmetries, and resolutions – plus column efficiency (number of theoretical plates) from raw data. For spectroscopists, PeakFit calculates peak amplitudes, areas, centers and widths – with complete uncertainty analysis, too!

Use PeakFit's 30 built-in peak functions (including Gaussian, Exponentially-Modified Gaussian, Voigt and many others specifically suited for chromatography and spectroscopy) or input and use your own! Output both graphs and data to over 150 printers, including PostScript®. Of course we can't promise that PeakFit will win you a grant (your competition may already be using PeakFit!), but we can promise that PeakFit will enhance your current analysis methods. Order PeakFit today and see just how many peaks there really are in your data!

Manufacturers: Call for OEM info!

Circle No. 22 on Readers' Service Card

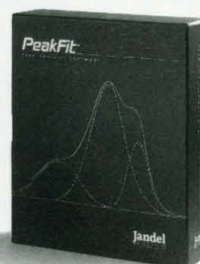
New Version 3.0!

PeakFit™
Peak Analysis Software
for the IBM PC

For free brochure:
800-874-1888 (U.S.)
415-453-6700 FAX 415-453-7769

From the makers of SigmaPlot®!

Jandel
SCIENTIFIC



2591 Kerner Blvd
San Rafael, CA 94901
Europe: Schimmelbuschstr. 25
4006 Erkrath, Germany

SuperANOVA for the Macintosh

"If you work with statistics professionally, buy this program."*

"SuperANOVA demonstrates that power nearly equivalent to that of SAS Proc GLM can be had with far less effort on the part of the user.

"For multivariate and univariate linear models calculations and displays, SuperANOVA is superior for its power, ease of use, and versatility.

"For scientists ... who do not want to invest a great deal of time in the sometimes complicated syntax of, for instance, SAS, SuperANOVA is the program that we would recommend."

— *The American Statistician*, 11/91

To find out more, call Abacus Concepts at 1-800-666-STAT. SuperANOVA has a suggested retail price (U.S.) of \$495. Ask about our discount plans for academic users.

ABACUS
CONCEPTS

© 1992 Abacus Concepts, Inc., 1984 Bonita Avenue, Berkeley, CA, 94706-1038, (510) 540-1949, (510) 540-0260 fax. SuperANOVA is a trademark of Abacus Concepts, Inc. All other brands are trademarks or registered trademarks of their respective holders.

* *Macworld* Magazine review, 5/90.

Circle No. 16 on Readers' Service Card



New Grant?

...Then get the latest about what's new in physiological research instrumentation

- New** automated syringe pumps
- New** gas anesthesia
- New** micromanipulators
- New** stereotaxic instrumentation
- New** MacLab™ data acquisition

Call (708) 860-9700 or send today for your free copy of Stoelting's 80 page, 1993 catalog for physiological and pharmacological research.

STOELTING

Stoelting Co., 620 Wheat Lane
Wood Dale, IL 60191 USA
(708) 860-9700

Circle No. 35 on Readers' Service Card




SCIENCE'S 2nd Annual

PHARMACEUTICAL/BIOTECHNOLOGY



CAREERS IN INDUSTRY

February 12, 1993




Full page and larger ads will be accepted for this special advertising section focusing on careers in today's Pharmaceutical and Biotechnology industry.

Harvey Research study on reader receptiveness:

- Find out first hand how readers react to your recruitment advertisement.

Reprint Distribution:

- 
- 37th Annual Biophysical Society meeting, Washington, DC, Feb. 15-17
 - Career Connection Biotechnology and Pharmaceutical Job Fairs in San Francisco, Feb. 19-20 and Philadelphia, Feb. 26-27.




Space reservation deadline:

January 26, 1993

Call Janis Crowley at 212-496-7704




for more information or to make your space reservation.



European Recruitment Advertising contact:

Annemarie Vis, +44 223 424 695

(24-hour phone and fax)



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 \$42 per line; \$420 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 424695 (24-hour FAX and phone).
- **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 1/2 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
+44 223 424695
(24-hour FAX and phone)

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

ASSISTANT PROFESSOR ENVIRONMENTAL SCIENCES

The Environmental Sciences Department, Cook College, Rutgers University invites applications for a tenure-track position beginning July 1, 1993. Duties include teaching graduate courses in the New Jersey Graduate Program in Public Health and undergraduate courses in Environmental Sciences (i.e., environmental health and industrial health), conducting research pursuant to the mission of the New Jersey Agricultural Experiment Station and the joint Rutgers/UMDNJ Environmental and Occupational Health Sciences Institute, and performing appropriate interdisciplinary activities which may include molecular epidemiology, industrial hygiene, exposure assessment, and farm worker and environmental health. A Ph.D. degree in Environmental Science, Environmental/Occupational Health, Industrial Hygiene, or related scientific field with experience in related research is required. Postdoctoral experience is highly desired.

Send curriculum vitae, statement of research interests, and three letters of recommendation to: Search Committee, Environmental Sciences Department, P.O. Box 231, Cook College, Rutgers, The State University, New Brunswick, NJ 08903. Review of applications will commence on March 15, 1993 and continue until a suitable candidate is selected.

Rutgers University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR PROCESS/MACHINE CONTROL ENGINEER DEPARTMENT OF AGRICULTURAL ENGINEERING UNIVERSITY OF MINNESOTA

The Department of Agricultural Engineering, University of Minnesota is seeking candidates for an assistant professor (12-month, tenure-track) position. The person is expected to initiate and conduct a teaching and research program in process and machine control with emphasis on improving the effectiveness of post-harvest handling, food and value-added processing, or bioprocessing operations. Requires Ph.D. by date of appointment in agricultural engineering or other engineering field with strong background in controls, machine vision and/or sensor technology. Educational background or experience in post-harvest handling, food engineering, value-added processing or bioprocessing is desired. Excellent verbal and written communication skills are necessary. Send letter of application, including curriculum vitae; a one-page summary of career goals in the context of the position; college transcripts; and names, addresses and telephone numbers of three professional references by March 1, 1993 to: Dr. R. V. Morey, Department of Agricultural Engineering, 1390 Eckles Avenue, University of Minnesota, St. Paul, MN 55108-6005.

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

ASSISTANT PROFESSOR (MOLECULAR ENTOMOLOGY)

The Department of Epidemiology and Public Health, Yale University School of Medicine, announces a position at the Assistant Professor level for a person with training in molecular entomology. Specifically, we are looking for a person with interests in insect symbiosis and population genetics to complement our new Vector Biology Program. Qualified candidates must have a Ph.D. or equivalent doctoral degree, postdoctoral training, and practical experience working with hematophagous insects. The successful candidate is expected to develop an independent, externally funded research program and to participate in departmental teaching responsibilities. Applicants should send curriculum vitae, a description of research interests, and a list of 3 references by March 31, 1993 to: Dr. Robert B. Tesh, Department of Epidemiology and Public Health, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RISK ASSESSMENT. Interdisciplinary environmental studies program offering M.A. degrees seeks a tenure-track ASSISTANT or ASSOCIATE PROFESSOR beginning August 16, 1993. Candidate must have Ph.D. in the natural sciences, environmental engineering, or an equivalent subdiscipline. Responsibilities: teach courses in risk assessment and environmental technology and policy, and supervise graduate research projects and theses. Secondary areas of specialization: solid waste, air and water quality.

Send letter of application describing teaching and research interests, curriculum vitae, transcripts, and names of three references to: Environmental Studies Search Committee, 322 Public Affairs Center, Sangamon State University, Springfield, IL 62794-9243. Review of applications will begin February 15, 1993 and continue until the position is filled.

Sangamon State University is an Affirmative Action/Equal Employment Opportunity Employer. Persons with disabilities, women, and minorities are encouraged to apply.

ASSISTANT PROFESSOR—Tenure-track—beginning fall 1993. The Department of Biological Sciences at Lehman College, CUNY has an opening for an individual with specialty in **plant products and secondary compounds**. The successful candidate will teach undergraduate courses in introductory biology, advise students, develop courses in area of specialty, develop a strong research program, and direct M.A. and Ph.D. students in the Lehman-New York Botanical Garden Ph.D. Program in Plant Sciences (Biology). Salary \$28,630 to \$37,018. Please submit curriculum vitae and three letters of recommendation by 3 February 1993 to: Thomas E. Jensen, Professor and Chairman, Department of Biological Sciences, Lehman College, Bronx, NY 10468.

THE DEPARTMENT OF MECHANICAL ENGINEERING, University of California at Berkeley seeks applications for a tenure-track position in Bioengineering and/or Biotechnology effective July 1, 1993. Applicants should hold a doctorate and have strong interests in teaching and research. The position is open in general to all areas of Bioengineering and Biotechnology including, but not restricted to: solid mechanics, rehabilitation, dynamics, fluid mechanics, control, heat transfer, design, materials, and tissue engineering. Candidates with theoretical and/or experimental research experience are invited to apply. The Department prefers appointment at the non-tenure, **ASSISTANT PROFESSOR** rank, but tenure appointment at Associate Professor or Professor may be considered for exceptional candidates. Applicants should apply in writing by submitting a résumé, statement of professional interests, one copy of each significant publication, and names, addresses and telephone numbers of five professional references for an Assistant-rank applicant and ten for a tenure-rank applicant to: Search Committee: Bioengineering and Biotechnology, c/o Chairman, Department of Mechanical Engineering, University of California, Berkeley, CA 94720. All applications received through February 26, 1993 will be considered. Applications submitted after the deadline will not be considered. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT or ASSOCIATE PROFESSOR of TOXICOLOGY. The Department of Pharmacology, Toxicology and Therapeutics at the University of Kansas Medical Center invites applications for a tenure-track position for a toxicologist. The applicants must have an appropriate Ph.D. or an M.D. with two years or more of relevant postdoctoral experience. The successful candidate will be expected to establish an independent research program and contribute to the teaching of graduate and medical students. Primary appointment will be in this department, but additional affiliation with the Center for Environmental and Occupational Health, Cancer, or Mental Retardation Research Center is possible. Applicants should send curriculum vitae and the names of three references to: Dr. Curtis D. Klaassen or Dr. Sam J. Enna, Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66160-7417. *The University of Kansas is an Affirmative Action/Equal Opportunity Employer.*

NEW ENGLAND BIOLABS

Molecular Biology and Biotechnology

Summer Workshop

WHEN:

Session I: May 30-June 12, 1993
Session II: June 17-June 30, 1993

WHERE:

Clark Science Center
Smith College
Northampton, MA

FACULTY:

Dr. Steven A. Williams
Dept. of Biological Sciences, Smith College,
Northampton, MA; and Program in Molecular and
Cellular Biology, University of Massachusetts

Dr. Molly Fitzgerald-Hayes
Dept. of Biochemistry and Program in Molecular
and Cellular Biology, University of Massachusetts

Dr. John McCarrey
Dept. of Genetics, Southwest
Foundation for Biomedical Research

Dr. Barton Slatko
New England Biolabs, Inc.

TO APPLY

for this workshop, please submit a recent curriculum vitae and a one page statement of motivation to:

Dr. Steven A. Williams
Dept. of Biological Sciences
Smith College
Northampton, MA 01063

We are pleased to announce the eighth annual New England Biolabs' Molecular Biology and Biotechnology Summer Workshops held at Smith College, Northampton, MA.

INTENSIVE BENCH EXPERIENCE: This intensive, two-week course emphasizes hands-on molecular biology laboratory work. About eight hours each day will be spent working at the bench. All of the work is hands-on; there are no demonstrations.

EXPERIMENTS WILL INCLUDE: Purification of DNA, restriction enzyme digestion, gel electrophoresis, construction of recombinant DNA molecules, cloning in plasmid and phage vectors, cloning strategies, bacterial transformation and transfection, Southern and Northern transfer and hybridization, radioactive and non-radioactive labeling of DNA, polymerase chain reaction, RNA PCR, in situ hybridization, and DNA sequencing. All of these techniques are woven into a cohesive research project carried out by each participant during the two-week session. Lectures and discussion sessions (at least three hours each day) will deal with all of the above topics and how these methods are applied in molecular biology research.

INTENDED FOR BEGINNERS IN MOLECULAR BIOLOGY.

No previous experience in molecular biology is required or expected. Thirty participants will be selected from a variety of disciplines and academic backgrounds. Last year's participants included principal investigators, directors of programs, postdoctoral fellows and research assistants. Their fields of research included biochemistry, medical physiology, immunology, microbiology, plant biology and others. They came from large universities, small colleges, hospitals, industry, and private foundations.

FEE: \$2700 per participant includes lab manual, use of all equipment and supplies, and room and board (all rooms are singles). Fee includes the use of the libraries and all campus athletic facilities including indoor and outdoor tennis courts, pool, weight room, track, etc.

APPLICATIONS MUST BE RECEIVED BY March 1, 1993.

Notification of acceptance, wait-list, or rejection will be mailed by March 7, 1993. Payment in full will be due by April 15, 1993. Your application should include a C.V. and a one page statement of motivation. Please specify the session to which you are applying and indicate if you wish to be considered for the other session as a second choice. Women and minorities are especially encouraged to apply. For additional information, please contact Dr. Steven A. Williams at (413) 585-3826.



32 Tozer Road, Beverly, MA 01915-5510

(508) 927-5054
TELEX 6817316

**TECHNICAL DIRECTOR
OFFICE OF NAVAL RESEARCH
AND
DEPUTY CHIEF OF NAVAL RESEARCH**

FEDERAL SENIOR EXECUTIVE SERVICE POSITION

The Technical Director (TD), Office of Naval Research (ONR), and Deputy Chief of Naval Research (DCNR) is the senior civilian manager in ONR. The mission of ONR is to plan and manage all Science and Technology for the Department of the Navy, including an annual investment of \$1.5 billion in basic research, exploratory development, and advanced technology development. The Chief of Naval Research reports to the Secretary of the Navy.

The TD/DCNR reports directly to the Chief of Naval Research (a Rear Admiral, U.S. Navy) and provides executive, technical, and scientific direction to ONR in the performance of its mission. The TD/DCNR exercises line management over ONR headquarters, the Naval Research Laboratory, and foreign offices in Europe and Asia. The incumbent will serve as the CNR's direct representative to the highest levels of the Department of Defense, the Department of the Navy, other branches of government, and national and international technical societies.

Fully qualified applicants will have extensive knowledge and experience in Science and Technology management; planning; policy development; and broad insight into national, Defense, and Naval challenges, opportunities, and programs. Demonstrated ability in execution of significant technology demonstration programs is highly desirable. Such knowledge and ability normally includes a doctorate level degree in one of the physical sciences or in engineering, or its equivalent in experience.

The selectee for this position will be offered a career appointment in the Federal service at the ES-1 (\$90,000) to ES-6 (\$112,000) level, depending on qualifications. An exceptionally well-qualified selectee may be authorized a one-time recruitment bonus of 25% of base salary (non-Federal employee) or a 25% relocation bonus (for Federal selectee only). In addition, career SES appointees compete for annual awards and bonuses based on job performance.

Interested individuals should submit a resume or Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to:

Office of Naval Research (Code 01HR1)
Ballston Tower #1
Attn: Announcement #92-31 (S)
800 N. Quincy Street
Arlington, VA 22217-5660

Applications will be accepted through 1 March 1993, and must be received by that date. For further information, please call (703) 696-4705, or TDD (telecommunication device for the deaf) (703) 696-2681.

U.S. Citizenship Required An Equal Opportunity Employer

POSITIONS OPEN



UNIVERSITY OF PENNSYLVANIA
Department of Physiology
School of Medicine

The Department of Physiology seeks to fill a tenure-track position, preferably at the **ASSISTANT PROFESSOR** level, in the area of **Transport Proteins**. Candidates expert in combining structure/function analyses and molecular biological techniques are especially encouraged to apply. Before March 15, 1993, please send us a curriculum vitae, two reprints or preprints, and a statement of research interests. Also have three letters of reference sent to:

Transport Protein Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085

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

**DARTMOUTH COLLEGE
ENVIRONMENTAL STUDIES PROGRAM
CONSERVATION OF BIOLOGICAL
RESOURCES**

Dartmouth College invites applications for a tenure-track **ASSISTANT PROFESSOR** to begin fall 1993. We seek candidates studying the conservation of biological resources including such topics as: biodiversity and sustainable use of lands; ecological and environmental consequences of changing land use patterns; and conflicts between natural resource development and conservation. Strong quantitative skills or expertise in spatial analysis desirable. The successful candidate will be expected to establish a vigorous externally funded research program and to teach at the undergraduate and graduate levels.

Ph.D. in ecology, conservation biology, natural resource management, or geography. Postdoctoral experience strongly desired. Submit curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference to: **Environmental Studies Search Committee, Environmental Studies Program, Dartmouth College, 6182 Murdough Center-Room 324, Hanover, NH 03755-3560. FAX: (603) 646-1279.** Review of applications will begin on February 1, 1993. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION, VIROLOGY

The Department of Microbiology at Colorado State University invites applications for an **ASSISTANT** or **ASSOCIATE PROFESSOR** tenure-track position to apply molecular biological approaches to problems in virology. Candidates should possess the Ph.D., D.V.M./Ph.D., M.D./Ph.D. or equivalent degree, and postdoctoral research experience in the biomedical sciences. The successful applicant will be expected to establish an independent research program, and participate in the teaching of the undergraduate, graduate and professional veterinary medical curricula. There will be ample opportunity to interact with faculty and students in our nationally recognized programs such as those concerning arthropod-borne infectious diseases, retroviruses, mycobacteria, and with the Diagnostic Laboratory of the Veterinary Teaching Hospital. Applicants should send curriculum vitae, a statement of research interests, and a list of at least three references to: **Dr. Jonathan Carlson, Search Committee Chairman, Department of Microbiology, Colorado State University, Fort Collins, CO 80523, Telephone: 303-491-7840.** Closing date for this application will be February 28, 1993. *Colorado State University is an Affirmative Action/Equal Opportunity Employer.*

EXERCISE PHYSIOLOGIST—The Department of Kinesiology is seeking an exercise muscle physiologist with expertise in cellular adaptations and/or calcium regulation of skeletal/heart muscle with acute and chronic exercise. The position is at the **ASSISTANT/ASSOCIATE PROFESSOR** (tenure-track) level but candidates at all levels will be considered. The position will begin August 1994, however, a 1993 starting date may be possible. Send curriculum vitae, three letters of reference and examples of publications to: **Dr. Robert S. Mazzeo, Search Committee Chair, Department of Kinesiology, Campus Box 354, University of Colorado, Boulder, CO 80309-0354.** All application materials must be postmarked by March 1, 1993 which will be the official deadline or until position is filled. *The University of Colorado is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, BIOTECHNOLOGY. The Department of Food Science, University of Massachusetts at Amherst invites applications for qualified individuals to fill a tenure-track faculty position in Food Biotechnology involving two-thirds research and one-third teaching at the Assistant Professor level. A Ph.D. in Food Science, Biochemistry, Microbiology, Molecular and Cell Biology or closely related field is required. Postdoctoral experience will be an advantage. Advising students, participation in team teaching at the undergraduate level and development of food biotechnology course are expected. The appointee will develop a research program involving immunological, genetic, microbial, enzymic or tissue culture techniques to enhance departmental activities in food safety, food quality and product and process development and attract extramural grants. Active participation in the University's Biotechnology Program and in its Molecular and Cell Biology Program is encouraged. Salary is competitive and commensurate with qualifications and experience. Applications are requested by April 1, 1993, but the search will remain open until the position is filled. Applicants should submit transcripts, résumé and have four letters for references sent to: **Dr. Robert E. Levin, Chair, Biotechnology Search Committee, Department of Food Science, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

The Department of Biological Sciences, University of Southern Mississippi, invites applications for a tenure-track **ASSISTANT PROFESSORSHIP**, beginning fall, 1993. The successful candidate, who must hold the doctoral degree, will participate in the teaching of a two-semester Human Anatomy and Physiology course, and offer other courses in areas of expertise. Individuals having experience in comparative anatomy, histology, and/or embryology are especially encouraged to apply. The appointee must also develop a vigorous, externally funded research program. Send letters of application, including a statement of research and teaching interests, curriculum vitae, and names of at least three references to: **Dr. James B. Larsen, Search Committee, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406-5018.** Application deadline: February 12, 1993. *An Affirmative Action/Equal Opportunity Employer.*

ENVIRONMENTAL BIOLOGIST—With specialization in aquatic insects or fish biology—**ASSISTANT PROFESSOR**—fall 1993—Tenure-track—Pending funding of position. To teach introductory courses in biology and upper-level courses appropriate to field of specialization; participate in the departmental environmental program; and conduct research appropriate to the involvement of undergraduate and master's-level students. Earned Ph.D. or award of Ph.D. no later than August 1993 and commitment to undergraduate and graduate education required. Credentials and experience comparable to the above will also be considered. Please send letter of application and résumé with names, addresses and telephone numbers of three references to: **Dr. Leeds Carluccio, Chairperson, Department of Biological Sciences, CENTRAL CONNECTICUT STATE UNIVERSITY, New Britain, CT 06050-4010.** Review of candidates will begin on February 4, 1993. *Central Connecticut State University aggressively pursues a program of Equal Employment and Educational Opportunity and Affirmative Action. People of color, women, veterans and persons with disabilities are invited and encouraged to apply.*

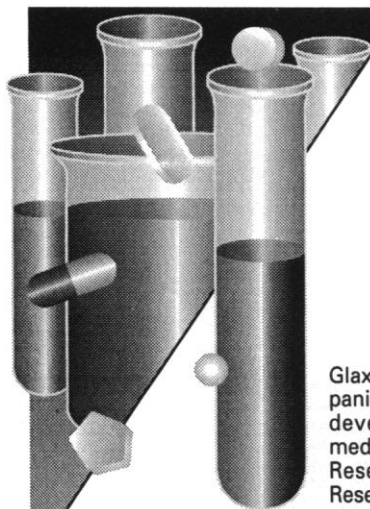


UNIVERSITY OF PENNSYLVANIA
Department of Physiology
School of Medicine

The Department of Physiology seeks to fill a tenure-track position, preferably at the **ASSISTANT PROFESSOR**, level, in the area of **Cellular Motility**. Candidates combining biophysical and molecular approaches are especially encouraged to apply. Before March 15, 1993, please send curriculum vitae, a statement of research interests, and two reprints or preprints. Also arrange to have three letters of reference sent to:

Motility Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085

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



A DYNAMIC MISSION

*At the Glaxo Inc.
Research Institute,
our priority is progress.*

Glaxo Inc., one of the largest pharmaceutical companies in the world, has an established record of developing the highest quality prescription medicines for unmet patient needs. Located in Research Triangle Park, N.C., the Glaxo Inc. Research Institute is a premier facility which provides a stimulating environment for scientists working in all aspects of discovery and development. We invite you to experience the challenges and accomplishments a future with us holds for you. The following openings are available.

SR. SCIENTISTS Cancer Research Apoptosis, Cell Cycle and DNA Repair

We have two openings in the Department of Cell Biology for **MOLECULAR BIOLOGISTS/BIOCHEMISTS** with experience in the areas of apoptosis and/or regulation of cell cycle progression in mammalian cells. These individuals will develop and lead research projects focusing on **APOPTOSIS AND CHECKPOINT CONTROL OF THE CELL CYCLE** as potential targets for novel cancer chemotherapy. The purpose of this research commitment is to integrate an understanding of apoptosis with that of cell cycle regulation, genomic integrity and DNA repair.

Successful candidates will be energetic individuals with leadership ability and creativity, in addition to scientific excellence. Active collaboration with other research teams both inside and outside the company is required. Qualifications must include a Ph.D. or M.D., plus a minimum of four years of relevant post-doctoral experience, and a proven record of achievement.

Please refer to position title and **Job # 9125B006-SC** on all resumes.

SR. SCIENTIST X-Ray Protein Crystallography

The Structural and Biophysical Chemistry Department is expanding both in terms of personnel and equipment. The Crystallography facilities include a crystallization robot, two rotating anode generators, a Siemens area detector, a Rigaku image plate detector, ESV graphics workstations, and access to a Cray Y-MP at the North Carolina Super Computer Center.

This position requires a Ph.D. with broad experience in protein crystallography, especially protein crystallization and MIR methods. Some experience in protein purification would be beneficial. This individual will also work closely with medicinal chemists in the design of novel inhibitors.

Please refer to position title and **Job # 9141-XR-SC** on all resumes.

Join Glaxo and enjoy excellent salaries, flexible benefits, an on-site fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial, and academic community in Research Triangle Park, N.C. Send your resume, which must include position title, corresponding Job # and salary history, to: **Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, N.C. 27709.** (No Phone Calls or Agency Referrals, Please) An Equal Opportunity Employer M/F/D/V.

Glaxo Inc.

The Time For Achievement Is Now

POSITIONS OPEN

ASSISTANT PROFESSOR HEALTH SCIENTIST

Hampshire College seeks a scientist working in a discipline related to human health, such as epidemiology, reproductive biology, nutritional biochemistry, or immunology. The new appointee will contribute to the curriculum in areas of ethnic minority health and/or women's health as well as to more traditional curriculum areas in biology. Hampshire College offers a stimulating and supportive environment for interdisciplinary teaching and research. The successful candidate will be expected to be active in the Third World and Women in Science programs. Faculty at Hampshire are expected to develop science courses and seminars and to supervise and evaluate a variety of student projects. The usual course teaching load at Hampshire is four courses per year. The appointee will be relieved from one of these courses in order to work with Asian American or Latino/a students at Hampshire's multicultural center on program development, advising, and special programming. Send curriculum vitae, the names of three references, and a letter of application to: Ms. Laurie Smith, Health Search Committee, School of Natural Science, Hampshire College, Amherst, MA 01002. The committee will begin reviewing applications on February 10, 1993. Hampshire College is an Equal Opportunity Employer and has embarked upon a vigorous Affirmative Action program. Women and minority candidates are strongly encouraged to apply.



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

Applications are encouraged from persons applying molecular biological and biophysical techniques to the study of **Ion Channels** for a tenure-track position in Physiology. Preference will be shown to applicants at the level of **ASSISTANT PROFESSOR**. Please send us (before March 15, 1993) curriculum vitae, a statement of research interests, and two reprints or preprints or relevant papers. Also arrange to have three letters of reference sent to:

**Ion Channel Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085**

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

The Biology Department of the University of Puerto Rico, Río Piedras has a tenure-track position for an **ASSISTANT PROFESSOR** (Ph.D. required). We are looking for someone whose research focuses on the comparative biology or systematics of terrestrial or freshwater invertebrates. He or she will be expected to develop a research program, seek external funding, advise graduate students (M.S. and Ph.D.), teach a course in general zoology, develop one or more advanced undergraduate or graduate courses, and curate an invertebrate collection. Facility in Spanish is desirable. Send applications, including letters from 3 referees by March 15, 1993, to: Dr. Richard Thomas, Biology Department, PO Box 23360, University of Puerto Rico, San Juan, PR 00931-3360.

The Polymer Science and Engineering Department at the University of Massachusetts, Amherst, seeks applications for positions as **ASSISTANT PROFESSORS** of Polymer Science and Engineering beginning fall 1993 or spring 1994. One position sought is in the area of polymer engineering with interests in the experimental mechanics of solids, and the other is in the area of polymer synthesis. Exceptional candidates with established programs may be considered for appointment with tenure as Professor or Associate Professor. Salary commensurate with qualifications and experience. Candidates should send curriculum vitae, a proposed research program, and arrange to have three letters of recommendation sent to: William J. MacKnight, Chairman, Faculty Search Committee, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003. The deadline for receipt of applications is March 1, 1993, but the search will continue until suitable candidates are found. All appointments are subject to final budgetary approval. *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

HOPKINS MARINE STATION OF STANFORD UNIVERSITY

announces the availability of
a **TENURED POSITION**.

The Hopkins Marine Station of Stanford University invites applications from distinguished senior scientists in the fields of evolution, conservation biology, population genetics, or phylogeography. We seek candidates who have made outstanding contributions to their field by the application of modern molecular and genetic techniques to addressing fundamental problems in evolutionary biology. Current and future interest in working on marine organisms is necessary. The appointment will most likely be made at the level of **FULL PROFESSOR** in the Department of Biological Sciences with residence at the Hopkins Marine Station. Applications, including research interests, curriculum vitae, and the names of five potential references, should be sent to: Dr. Dennis A. Powers, Director, Hopkins Marine Station, Stanford University, Pacific Grove, CA 93950-3094, no later than February 15, 1993.

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

ASSISTANT PROFESSOR—GROSS ANATOMY

The Department of Anatomy of the Kirksville College of Osteopathic Medicine is seeking applications for a tenure-track assistant professor position. Applicants must hold a doctoral degree in a biomedical science. Previous teaching experience in Human Gross Anatomy is required. Successful candidates should have postdoctoral experience, and must develop an independent research program. Application materials (curriculum vitae, names of three references, and a description of research interests) are to be sent to: Lex C. Towns, Ph.D., Department of Anatomy, Kirksville College of Osteopathic Medicine, Kirksville, MO 63501. Effective appointment date is July 1, 1993. *Equal Opportunity/Affirmative Action Employer.*

MICROBIOLOGY

The Discipline of Microbiology invites applications for a tenure-track position in microbiology at the **ASSISTANT PROFESSOR** level, beginning fall 1993. A Ph.D. is required. The candidate is expected to teach medical microbiology to first- and second-year osteopathic medical students. Major emphasis is on teaching and service to the college, but research is encouraged. *The College actively seeks applications from women and minorities for this position.* Applicants should submit curriculum vitae, transcripts, three letters of recommendation and a statement of teaching philosophy and career objectives to:

**Chairman, Microbiology Search Committee,
College of Osteopathic Medicine of the Pacific,
College Plaza
Pomona, CA 91766**

Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF PSYCHOLOGY NEUROSCIENTIST/ NEUROPSYCHOLOGIST

Tenure-track position at **ASSISTANT PROFESSOR** level available for a person with an active research program, an interest in involving undergraduates in research, and a strong commitment to undergraduate teaching at both the introductory and advanced levels. We would prefer research interests in one or more of the following areas: cognitive neuropsychology, neural aspects of lifespan development, clinical aspects of neuroscience, physiological psychology. Smith College offers collaborative opportunities with faculty members in the Five Colleges (Amherst, Mount Holyoke, Hampshire, Smith, and the University of Massachusetts) drawn from departments of psychology, biology, chemistry, computer science, and communication disorders. Application deadline: March 15, 1993. Send a letter describing your interests and goals, curriculum vitae and 3 letters of reference to: M. Harrington, Department of Psychology, Smith College, Box 685, Northampton, MA 01063. *An Affirmative Action/Equal Opportunity Institution. Minorities and women are encouraged to apply.*

POSITIONS OPEN

UNIVERSITY OF COLORADO SCHOOL OF MEDICINE

The Department of Cellular and Structural Biology seeks to strengthen its programs in **DEVELOPMENTAL BIOLOGY, CHEMICAL SENSES, CELL BIOLOGY** by filling at least two tenure-track faculty positions. Successful candidates have an M.D. or Ph.D. degree, significant postdoctoral experience, and the ability to develop a strong, independent research program. Preferred research areas are the cellular and molecular aspects of vertebrate or invertebrate development, the cellular and molecular aspects of chemical senses, including taste and smell, or fundamental problems in cell biology. Candidates are expected to teach in the Department's instructional programs and may be appointed at the **ASSISTANT PROFESSOR** or higher levels.

The Department of Cellular and Structural Biology and the Health Sciences Center offer a rich, congenial, interactive research environment, strong interdepartmental graduate programs, and excellent facilities. Applications will be reviewed starting February 15, 1993. Send curriculum vitae, publication list, a one-page statement of current and future research goals, and the names of three references to: Dr. Joan Hooper, Chair, Search Committee, Department of Cellular and Structural Biology, UCHSC, 4200 East Ninth Avenue, B-111, Denver, CO 80262.

The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.

RESEARCH INSTRUCTOR OR RESEARCH ASSISTANT PROFESSOR

A 12-month, full-time position is available immediately in the Division of Nutritional Pathophysiology, University of Alabama at Birmingham (UAB). The individual will assist in the day-to-day operation of *in vivo* cancer chemoprevention and toxicity studies and will develop own research interests. Candidates must hold a Ph.D. or D.V.M. Experience with long-term studies in rodents desired. Send curriculum vitae to: Dr. Clinton J. Grubbs, Department of Nutrition Sciences, UAB, 1675 University Boulevard, Birmingham, AL 35294. *UAB is an Affirmative Action/Equal Opportunity Employer.*

ORGANISMAL BIOLOGIST THE UNIVERSITY OF CHICAGO

The Department of Organismal Biology and Anatomy at the University of Chicago invites applications for a tenure-track position. The department has a broad interest in the mechanism and evolution of organismal function and seeks to recruit a new faculty member who will complement or augment its existing strengths in **physiology, developmental biology, or neuroethology**. We are interested in individuals who can bring modern techniques to bear on problems in either vertebrate or invertebrate biology. Although we expect to fill this position at the **ASSISTANT PROFESSOR** level, rank is open. Applicants should send curriculum vitae, statement of research interests, and names of three referees to: Chair, Search Committee, Department of Organismal Biology and Anatomy, The University of Chicago, 1027 East 57th Street, Chicago, IL 60637. *The University of Chicago is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION IN VISION RESEARCH JULES STEIN EYE INSTITUTE University of California Los Angeles

The Retina Division of the Department of Ophthalmology at UCLA and the Jules Stein Eye Institute and Doris Stein Eye Research Center invite applications for the position of **ASSISTANT** or **ASSOCIATE PROFESSOR** of Ophthalmology to establish a research program in Retinal Transplantation. Candidates should possess a Ph.D. in Cell Biology, strong background in vision research, ability and interest in teaching, and desire to collaborate with both basic scientists and clinicians. Preference will be given to candidates with expertise in Retinal Transplantation who have demonstrated research potential and a record of extramural funding. Qualified individuals should submit curriculum vitae, three references, and a letter describing research interests and accomplishments to: Hilel Lewis, M.D. or Dean Bok, Ph.D., Jules Stein Eye Institute, 100 Stein Plaza, UCLA School of Medicine, Los Angeles, CA 90024. *UCLA is an Equal Employment Opportunity/Affirmative Action Employer.*

Postdoctoral Opportunities In The Biomedical Sciences.

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

Biochemistry and Molecular Biology of Ascorbic Acid **Mark Levine, MD**

The translocation of ascorbic acid (vitamin C) across cell membranes and its action on gene transcription are being studied. Ascorbic acid regulation of oxidant quenching in neutrophils, regulation of collagen biosynthesis in fibroblasts, and pharmacokinetics in humans are also being examined. Background in molecular genetics or protein chemistry preferred. Candidates must have five or fewer years of postdoctoral experience. Laboratory of Cell Biology and Genetics (OE-25), NIDDK, Building 8, Room 415.

Cell Biology, Biochemistry, Enzymology, and Molecular Biology **Seymour Kaufman, PhD**

The biological functions of tetrahydrobiopterin are being studied, including its role as the essential coenzyme in the synthesis of monoamine neurotransmitters and other biofactors such as nitric oxide (endothelium-derived relaxing factor). Candidates are being sought who are interested in the following areas: **cell biologists and biochemists** to investigate new roles for tetrahydrobiopterin, such as in cell proliferation, neurotransmitter release, and immune response; and **enzymologists and molecular biologists** to study the structure, mechanism of action, and regulatory properties of the above enzymes. Laboratory of Neurochemistry (OE-25), NIMH, Building 36, Room 3D30.

G-Protein Structure and Function **John Northup, PhD**

Two positions are available to study the structure and function of G-proteins. Projects include the expression and reconstitution of recombinant G-protein-coupled receptors, cloning and expression of novel G-protein subunits and mutations, and identification of novel effector regulation by G-proteins. Laboratory of Cell Biology (OE-25), NIMH, Building 36, Room 2D30.

HIV Gene Expression and Pathogenesis **Steven L. Zeichner, MD, PhD**

The interrelationships among differentiation, development, and HIV pathogenesis are being studied at the molecular level. Projects include the identification, characterization, and cloning of differentiation-dependent and developmentally-regulated factors that influence HIV gene expression and pathogenesis, as well as the investigation of the cellular functions involved in viral replication. Pediatric Branch (OE-25), NCI, Building 10, Room 13N240.

Malaria Vector Biology **Kenneth D. Vernick, PhD**

The relationship between mosquito vectors and associated malaria parasites is being studied at the molecular level in order to develop novel approaches for malaria transmission control. Specific interests include developmental biology of malaria in the mosquito host, identification of salivary gland receptors for sporozoite invasion, genetic systems of malaria-refractoriness in mosquito vectors, and population biology of the major African malaria vector *Anopheles gambiae*. Laboratory of Malaria Research (OE-25), NIAID, Building 4, Room 126.

Molecular Immunology **Keiko Ozato, PhD**

Transcriptional regulation of MHC Class I genes is being studied in order to better understand the role of gene regulation in controlling the development of the immune system. Cis regulatory elements of MHC Class I genes and trans-acting factors that bind to these elements have been identified and several genes encoding proteins that bind to these elements have been isolated. Future experiments will focus on the mechanisms of action of these transcription factors. Laboratory of Molecular Growth Regulation (OE-25), NICHD, Building 6, Room 2A01.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 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.

A catalog describing NIH research opportunities may be accessed via the network-based (Internet) Gopher Information System. Configure your software to point to the Internet address "gopher.nih.gov" and port "70" to access NIH Gopher and then choose *NIH 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

SCIOS NOVA

We're Scios Nova, an emerging biopharmaceutical leader with a broad technology base including five products in clinical trials and several others in pre-clinical testing. Scios Nova is committed to being on the leading edge for the discovery, development and commercialization of novel therapies for the treatment of human disease, and is seeking individuals who share that commitment. If you're seeking an innovative and supportive corporate culture, contact us today.

Development Department Head

Purification Development/Protein Chemistry

Lead an R & D team responsible for the purification and characterization of recombinant therapeutic proteins used in various research projects. In this dynamic environment, you will also develop processes that will be scaled up and transferred to manufacturing, as well as conduct protein characterizations (i.e. sequencing, peptide mapping, amino acid composition). Ideally, you will have a background in chromatography process design, analytical methods and protein separation techniques. A PhD coupled with 5 years' experience and a proven record of performance in an industrial setting are required. Position code: S100

Research Senior Scientist Inflammation/Immunology

We seek an independent investigator to participate as a key member of a team introducing a new product to market. You will have responsibility for investigating the mechanism of action of a new class of inflammation inhibitors, leumedins; establishing structure-activity relationships for new compounds; and contributing to the creation and evaluation of ideas about new products/programs. Scientists with a PhD in the Biomedical Sciences and at least 3-5 years' related experience are encouraged to apply. Background as a team leader is a plus. Position code: S101

Scios Nova offers a stimulating scientific environment and an outstanding compensation/benefits package. Please send your resume, indicating position code, to: Scios Nova Inc., Human Resources, 2450 Bayshore Parkway, Mountain View, CA 94043. Or FAX to: (415) 962-5966. Equal Opportunity Employer.

ATTENTION Science ADVERTISERS... \$50 SPECIAL

Place your classified ad in any January-March 1993 issue of *Science* and get double exposure. We'll display the same position announcement at the Employment Exchange during the AAAS Annual Meeting for only \$50 more.

When you place your classified ad in *Science*, simply let us know that you want to take advantage of the \$50 Special and we'll do the rest.

The Employment Exchange will take place at the AAAS Annual Meeting, 11-16 February 1993, at the Hynes Convention Center in Boston, Massachusetts.

Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 13 November 1992 issue of *Science*, or contact Jacquelyn Roberts at (202) 326-6737, Fax: (202) 842-1065.

NATIONAL INSTITUTE OF DIABETES, DIGESTIVE AND KIDNEY DISEASES NATIONAL INSTITUTES OF HEALTH POST-DOCTORAL POSITION

A post-doctoral fellowship is available immediately for a recent Ph.D. in molecular genetics or related discipline to participate in studies of the genetic determinants of non-insulin dependent diabetes mellitus in man. The position is funded through the NIH Intramural Research Training Award Program and has a starting annual stipend of \$25,000 to \$38,000 depending on the level of previous post-doctoral experience.

Send curriculum vitae to:

Clifton Bogardus, M.D.
**Clinical Diabetes and
Nutrition Section**
National Institutes of Health
4212 N. 16th Street, Room 541
Phoenix, Arizona 85016



NIH is an Equal Opportunity Employer

LUDWIG INSTITUTE INSTITUTE SAO PAULO CANCER BRANCH RESEARCH LUDWIG IN 10th ANNIVERSARY

MEETING ANNOUNCEMENT

BASIC AND APPLIED CANCER RESEARCH

April 1 - 3, 1993

INTERNATIONAL SYMPOSIUM ON HUMAN PAPILLOMAVIRUS

April 4 - 6, 1993

São Paulo - Brazil

Cancer Inheritance; Biochemistry of the Transformed Phenotype; Tumor Immunology and Metastases; Etiology, Diagnosis and Epidemiology; Transformation, Immune Responses and Epidemiology of H.P.V.

Speakers:

HU Bernard, W Bodmer, R Brentani, L Brinton, A Burgess, JC Cerottini, R Chammas, J. Cuzick, JW Dennis, N Dyson, EL Franco, M Fukuda, P Garin-Chesa, G Hart, J. Huijbregtse, S Jenison, L Koutsky, I Magrath, J Malejczyk, M Manos, K Munger, N Muñoz, J Pietenpol, M Schiffman, V. Schirmacher, E Solomon, LL Villa, K Vousden, M Waterfield

**Registration
and
Abstract Deadline
March 1st., 1993**

Contact

Dr. Luisa L. Villa or Libeca M. Ward
Instituto Ludwig de Pesquisa sobre o Câncer
r. Prof. Antonio Prudente #109, 4th floor
CEP 01509-010
Phone: (011)270-4922 Fax: (011)270-7001
São Paulo SP - BRAZIL

NATIONAL INSTITUTES OF ENVIRONMENTAL HEALTH SCIENCES
RESEARCH TRIANGLE PARK, NORTH CAROLINA

NATIONAL INSTITUTES OF HEALTH

POSTDOCTORAL POSITION

Postdoctoral position available to study the molecular mechanisms of DNA repair and homologous recombination in *Drosophila melanogaster*. Research opportunities include study of the in vivo and in vitro functions of *Drosophila* Rrp1 (Recombination repair protein 1). This protein is potentially important in both DNA repair and homologous recombination (Proc. Natl. Acad. Sci. 88, 6780-84, 1991). Rrp1 is a homologue of the bacterial repair protein *Escherichia coli* exonuclease III with which it shares some enzymatic and functional similarities. Experiments are in progress to test for functional complementation of DNA repair and homologous recombination defects in mutant strains of *E. coli*. Additional areas of future studies will include site-directed mutagenesis, physical analyses of the Rrp1 protein and protein/DNA complexes and both developmental and genetic studies of Rrp1 function in *Drosophila*.

Applicants must have a Ph.D. or equivalent degree in Biochemistry, Cell Biology, Molecular Biology or a closely related field. Candidates with 0-7 years of postdoctoral experience will be considered. For more information contact Dr. Miriam Sander (919) 541-2799. **The closing date for receipt of applications is August 15, 1993.**

For immediate consideration, send cover letter describing research experience, curriculum vitae and three letters of reference to: **Mr. Bruce Wiggins (HNV60)**

**National Institute of Environmental
Health Sciences
Personnel Office
P.O. Box 12233
Research Triangle Park, North Carolina 27709
(919) 541-3317**



*NIH is an Equal Opportunity Employer
NIH is a Smoke-Free Environment
Smoking is not allowed in any NIEHS Building*

Sr. RESEARCH

ASSOCIATE

At Baxter Healthcare Corporation, our commitment to R&D is evident in our Global Business Group. Today, this Fortune 75 Corporation is seeking a Sr. Research Associate to join our Blood Substitute Program at our state-of-the-art R&D campus.

You will plan, develop, execute, document and report analyses of low molecular weight analytes, peptides and proteins, and develop, execute and interpret immunologic assays of the effects of hemoglobins on formed elements in the blood. Other responsibilities will include assisting in related product development activities, and presenting results to colleagues and the scientific community.

The ideal candidate will possess a Ph.D. in Biochemistry or an M.S. in Biochemistry with lab experience. You must be able to use HPLC, spectroscopy, electrophoresis, ELISA techniques for protein determination and analysis, and have the ability to present scientific information in oral and written form.

We can offer you a competitive salary and comprehensive benefits package. Please send a resume to: Global Human Resources, Baxter Healthcare Corporation, Rte. 120 & Wilson Rd., WG2-3S, Round Lake, IL 60073. An Equal Opportunity Employer.

Baxter

Sr. Scientist Protein Chemistry

The Biology and Biotechnology Research Program at Lawrence Livermore National Laboratory is seeking a senior scientist/principal investigator to join its expanding, multidisciplinary research team. The individual is expected to develop a broad, interactive effort in the structural analysis of mammalian proteins.

The applicant should be accomplished in protein purification, antibody production, and immunochemistry and be willing to collaborate with other staff. Start-up funds are available to characterize, on a collaborative basis, over-expressed human proteins involved in DNA repair. Several years of postdoctoral (or equivalent) experience, the ability to operate as an independent investigator and interact extensively with other scientists are required.

The BBR Program offers excellent research facilities and a competitive salary and benefits package. For more information contact: Dr. Larry Thompson, DNA Repair and Chromatin Group Leader at 510-422-5658 or Fax 510-422-2282. Interested applicants are invited to send their CVs including references to: Phil Harding, Professional Employment Division, Lawrence Livermore National Laboratory, PO Box 5510, Dept. #A93169BS, Livermore, CA 94551. U.S. citizenship preferred. We are proud to be an Equal Opportunity Employer. M/F/D/V.

University of California

 **Lawrence Livermore
National Laboratory**

POSITIONS OPEN

ASSISTANT PROFESSOR OF FOREST ECOLOGY SCHOOL OF FORESTRY THE UNIVERSITY OF MONTANA

The University of Montana's School of Forestry seeks applications for Assistant Professor of Forest Ecology. This tenure-track, academic-year appointment involves the traditional role of teaching, research and public service. Responsibilities include teaching an undergraduate course in Forest Ecology and additional courses in areas such as community and landscape ecology. The successful applicant will be expected to assume a leadership role in the developing field of ecosystem management in the inland west. The job description and application information may be obtained from:

Chair, Forest Ecology Search Committee
School of Forestry, The University of Montana
Missoula, MT 59812

Telephone: (406) 243-5522; FAX: (406) 243-4845

Review of applications will begin March 1, 1993, and continue until an appointment is made. *The University of Montana is an Affirmative Action/Equal Opportunity Employer. Applications from women, minorities, and members of other protected classes are encouraged.*

HYPERTENSION AND VASCULAR RESEARCH—A full-time, tenure-track faculty position at the level of ASSISTANT, ASSOCIATE, or FULL PROFESSOR is open in the Section of Hypertension and Vascular Research in the Division of General Internal Medicine at the University of Texas Medical Branch (UTMB) on Galveston Island. Candidates must have an M.D. and/or Ph.D. degree, demonstrate ability to gain independent funding, and be eager to join a growing research group with collaborative initiatives at both basic and clinical levels. Expertise in one of the following areas would be valuable: Vascular or endothelial cell biology as it relates to hypertension or atherosclerosis, transgenics, molecular mechanisms of hormone action, and gene therapy. Please submit curriculum vitae and names of three references to: **Richard Bokeski, Ph.D., Head of Search Committee, Hypertension and Vascular Research J-65, University of Texas Medical Branch, Galveston, TX 77555-5146. Equal Opportunity/Affirmative Action Employer M/F/D/V. UTMB is a smoke-free/drug-free workplace. UTMB hires only individuals authorized to work in the United States.**

UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER SCHOOL OF PHARMACY

The Division of Pharmaceutical Sciences invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level. A Ph.D. degree and postdoctoral research experience are required; a degree in pharmacy or experience in a pharmacy school setting is desirable but not essential. Candidates must demonstrate potential for developing independent, extramurally funded research that complements ongoing programs in molecular toxicology, pharmacology or drug development. The successful candidate will participate in teaching pharmacology in the professional degree program and will contribute to graduate-level courses in the Ph.D. program in Pharmaceutical Sciences or Toxicology. Applicants should submit curriculum vitae, a brief description of research interests, reprints of three significant recent publications and a list of three references by March 1, 1993 to: **Dr. Ralph J. Altieri, Chair, Faculty Search Committee, University of Colorado Health Sciences Center, School of Pharmacy, Campus Box C238, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado Health Sciences Center is an Equal Opportunity/Affirmative Action Employer.**

CHIEF, HUMAN GENETICS AND MOLECULAR BIOLOGY. Department of Pediatrics seeks scientist working in modern aspects of molecular biology with ability and interest to lead the Division of Human Genetics and Molecular Biology into the 21st century. A tenure-track position will be offered. Both physician and Ph.D. candidates send curriculum vitae to: **Bernard Kaplan, M.D., Chair, Genetics Search Committee, The Children's Hospital of Philadelphia, 34th and Spruce Street, Wood Building—Room 3380, Philadelphia, PA 19104. The University of Pennsylvania is an Equal Opportunity, Affirmative Action Employer.**

POSITIONS OPEN

CELLULAR/MOLECULAR NEUROPHYSIOLOGIST

The Department of Physiology, State University of New York (SUNY), Health Science Center at Syracuse invites applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. Applicants should have a Ph.D. and/or M.D. degree and at least three years of postdoctoral experience. The department is seeking a neurophysiologist with a well developed research program in cellular or molecular neurobiology. The position also requires competence in teaching in medical and graduate courses. Salary and start-up funds will be provided. Interested individuals should send a copy of their curriculum vitae, three letters of reference and a statement of research goals, to: **Dr. Alex Bortoff, Department of Physiology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Deadline for application is April 1, 1993. The SUNY Health Science Center at Syracuse is an Affirmative Action/Equal Opportunity/ADA Employer.**

MANAGER BIOTECHNOLOGY CORE FACILITY

The Ohio State University Biotechnology Center seeks a core facility manager to provide research support services. The position requires hands-on experience in protein and nucleic acid sequencing and synthesis. Knowledge of molecular biology desirable. A competitive salary and benefits will be provided. Send curriculum vitae and list of references to: **Director, Ohio State Biotechnology Center, 1060 Carmack Road, Columbus, OH 43210-1002. 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.**

1993
M.D.

DIRECTOR OF MEDICAL RESEARCH

- 1.) Responsible for HIV Therapeutic Vaccine and Aids Therapeutic antibody products through clinical trials. Salary is open.
- 2.) Responsible for bringing leading anti-cancer agents through trials. Salary is open.

P.K. SCIENTISTS

- 1.) Pre-clinical, Drug Metabolism, IND & NDA's. M.S. to Ph.D. Salary: \$65,000 per year.
- 2.) Assistant Director Clinical—Phase I for unique dosage forms. Ph.D. Salary: \$70,000 to 90,000 per year.
- 3.) Support protocol design and learn nonmem. Salary: \$45,000 to 55,000 per year.

In addition we have openings for Analytical/Support, Peptide Synthesis, protein purification both Research and Engineers.

For further information call or send résumé to: **Guy Andrew, CENTRAL CLEARING, INC., 10031 West Roosevelt Road, Westchester, IL 60154. Telephone: (708) 450-2660; FAX: (708) 450-2676.**

CHAIR, Department of Fisheries and Aquatic Sciences University of Florida

The University of Florida invites applications and nominations for Chair of the Department of Fisheries and Aquatic Sciences (Position #DFA-1218). Candidates must have a Ph.D. in an appropriate discipline. The Chair is encouraged to conduct research and teach one course per year. *Applications from women and minorities are encouraged.* A complete position description can be obtained from the department. Interested candidates must submit a letter of application, curriculum vitae, and five letters of reference to: **Dr. Daniel E. Canfield, Jr., Department of Fisheries and Aquatic Sciences, 7922 NW 71st Street, Gainesville, FL 32606-3071. Telephone: (904) 392-9617. Open until March 15, 1993.**

An Equal Opportunity/Affirmative Action Institution.

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN



SCIENCE DEAN California State Polytechnic University, Pomona

Applications and nominations for Dean of the College of Science are invited. The position reports to the Vice President for Academic Affairs. Duties and responsibilities include: Leadership in all academic and operational matters; extensive cooperative interaction with university community; promotion of affirmative action efforts to diversify faculty and staff; promotion of educational equity efforts; and development and fundraising activities. Required qualifications include: Earned doctorate and academic credentials supporting a faculty appointment, university-level teaching experience, record of scholarly/research achievements, three years of successful administrative experience, history of successful working relationships with students, faculty, and administrators, and clear philosophy of the role of the College in a comprehensive university. All candidates must demonstrate responsiveness to the educational equity goals of the university and its increasingly diverse ethnic, cultural, and international character. Date of appointment: August 1, 1993, or as soon thereafter as practical. Salary: Commensurate with qualifications and experience; a substantial benefits package is included. Committee consideration of completed applications will begin on March 15, 1993, and will continue until the position is filled. Please address nominations or requests for application packages to: **Dr. Sidney A. Ribreau, Vice President for Academic Affairs, California State Polytechnic University, Pomona, CA 91768-4016. California State Polytechnic University, Pomona is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH FACULTY POSITIONS BIOLOGICAL PSYCHIATRY

The Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center invites applications to fill several tenure-track research positions for its newly established laboratories. Candidates should hold a M.D. or Ph.D. with at least two years of postdoctoral experience in one or more of the following areas: molecular biology, receptor binding, receptor cloning, brain imaging, molecular genetics, neuropsychopharmacology, microdialysis. Prior research with biogenic amines, neuropeptides and psychotropic drugs is highly desirable. Candidates should have demonstrated ability to develop research programs and to compete successfully for extramural funding. Joint appointments to basic science departments are possible. Teaching responsibilities are not excessive. Faculty rank and salary commensurate with degree and level of experience. Applicants should send a curriculum vitae, an outline of research interests and the names of three individuals who have agreed to provide letters of recommendation to: **Dr. Norman C. Nelson, Vice Chancellor and Dean, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. Applications will be accepted through April 1, 1993. Equal Opportunity Employer, M/F/D/V.**

FACULTY POSITION IN IMMUNOLOGY: A faculty appointment is available in the Department of Immunology at St. Jude Children's Research Hospital. This is a full-time research position, which can be held at any academic rank. Applications from both new and established investigators are welcome. The Department currently has strong programs in molecular and cellular immunology, with specific interests in T lymphocyte ontogeny and effector function, genetic immunodeficiencies, the regulation of gene expression, macrophage/T cell interactions, autoimmunity, mechanisms of tolerance and viral immunity. A new faculty member might either establish an independent effort complementing one of these existing areas, or provide a completely different focus. Major research groups in other departments at St. Jude Children's Research Hospital are concentrating on: growth regulation and signal transduction in hemopoietic cells, human bone marrow transplantation, cancer chemotherapy, respiratory pathogens and Epstein Barr virus. The research environment is highly interactive, and collaboration is encouraged.

Enquiries should be directed to: **Dr. Peter C. Doherty, Chairman, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer. We provide a smoke free environment.**

Second Annual...

WOMEN IN SCIENCE

"Gender and the Culture of Science"

Recruitment Advertisers:

Women in Science...certainly an important topic for employers in all disciplines. This 2nd annual cover story will attempt to shed insight into many issues vital to female scientists and the companies and universities where they do science.

Don't miss this opportunity to express your institution's commitment to equal opportunity employment and the advancement of women by placing a full-page or larger ad in the same section with this compelling editorial information.

Some of the questions raised will be...

☛ Is there a uniquely female approach to scientific problems?

☛ Which disciplines are male and female scientists more predominant in—is there a pattern?

☛ Is industry a better environment for women researchers? What programs have companies developed that make a difference? What hasn't worked?

☛ Is there a "female" model for success in science, and if so, how does it differ from the male version?

☛ Are the issues facing American women global issues, or are the barriers and frustrations different in Europe and Japan?

Bonus Distribution

Full issues will be distributed to both of these important societies:

**Association for Women in Science
and
Association for Graduate Women in Science**

**Please call
Janis Crowley at 212-496-7704
to reserve your space today!**

**For European
Recruitment Advertising, contact
Annemarie Vis, at +44 223 424 695
(phone and fax).**

**Space reservation deadline:
30 March 1993**

New Research Identification Manager

At Genentech, Inc., our success as an entrepreneurial biotechnology company has made us one of the most stable in the industry. Our progressive environment and state-of-the-art facilities provide exceptional opportunities at all levels. We're currently seeking a PhD or MD Scientist to identify and assess new research opportunities.

This person will evaluate and recommend potential new research areas, establish research collaborations with outside investigators and monitor the progress in our areas of research interest. This will require attending scientific meetings, developing and maintaining relationships with investigators at major universities and research institutes as well as working with other Genentech scientists to discover and evaluate new uses for Genentech's recombinant proteins. In addition to an MD or PhD in one of the life sciences, this position requires at least 2 years' postdoctoral work and a broad interest in biology with flexibility about the area(s) of specialization. The desire to apply exciting science to the development of human therapeutics and excellent communication skills are essential. Travel is required.

Genentech offers an exceptional benefits package which includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities and free health club membership. Send your resume to: Genentech, Human Resources Dept. WR/WS, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity.

Genentech, Inc.

WOMEN IN SCIENCE

March 13 Reprint

This first-time special section, reprinted from the March 13 issue of **SCIENCE**, takes an in-depth look at women in science.

This section explores:

Women's Progress in Science
Career Advancement
Networking
Mentoring
Two Career Couples in Science
Women's Progress in Mathematics, Chemistry, and Life Sciences

Also included are profiles of women "who have made it" in science, as well as valuable insights on the key to their success.

To order your copy, send \$2.50 plus \$0.50 postage and handling to:

SCIENCE

Attn: Corrine Harris
1333 H Street, N.W.

Washington, D.C. 20005

Telephone: 202-326-6527

Visa and MasterCard orders
accepted by

Fax: 202-682-0816

Bulk rate for orders of 10 or more is \$1.00 per copy.

NATIONAL INSTITUTE OF DIABETES
AND DIGESTIVE AND KIDNEY DISEASES
NATIONAL INSTITUTES OF HEALTH

SCIENTIST / PHYSICIAN

The Division of Digestive Diseases and Nutrition seeks an outstanding scientist/physician with a Ph.D., M.D., or M.D./Ph.D. interested in developing and administering a grant portfolio in liver, gallbladder, and pancreatic disease such as the solicitation of grants, contracts, clinical trials, and training programs. Recent knowledge or experience in the sciences fundamental to some aspect of liver and pancreatic research highly desirable. Possibility of some time for bench research activity and continuing clinical activity. Starting salary commensurate with qualifications and experience. Position availability beginning Spring 1993. Interested candidates should address inquiries and submit curriculum vitae, summary of research interests, and names of three references to:

Jay H. Hoofnagle, M.D.
National Institute of Diabetes and
Digestive and Kidney Diseases
National Institutes of Health
Building 31, Room 9A23
9000 Rockville Pike
Bethesda, Maryland 20892
Phone: (301) 496-1333



NIH is an Equal Opportunity Employer

UNIVERSITY OF YORK

Department of Environmental Economics
and Environmental Management

Senior Lecturer in Ecological Economics
Senior Lecturer in National Resource Management

Applications are invited for two senior lectureships, one in ecological economics, the other in natural resource management, in the Department of Environmental Economics and Environmental Management (EEEM). Exceptionally, candidates may be considered for appointment at the level of Reader. Candidates should have a strong research record in ecological economics/natural resource management, but applications will also be considered from candidates whose research is in a closely related area. A research interest in the international dimensions of the economics and management of resources may be an advantage.

EEEM is a new initiative of the University of York, and will offer BSc, MSc, Diploma, MPhil and DPhil degrees in Environmental Economics and Environmental Management. The core of all non-research degrees will include courses in economics and ecology, with the department providing courses in, inter alia, conservation and management, ecological economics, environmental law, bioeconomic modelling, and regional environmental planning.

The posts are available from 1 October 1993. The salary will be within the Senior Lecturer scale £25,969-£29,348 per annum.

Informal enquiries may be made to **Professor Charles Perrings, Head of the Department of Environmental Economics and Environmental Management**, by telephone 0904 432999 or fax 0904 432998.

Six copies of applications with full curriculum vitae and the names of three references should be sent by 7 February 1993 to the Personnel Office, University of York, Heslington, York YO1 5DD from whom further details are available. Please quote reference number 6/3353.



**THE UNDP/WORLD BANK/WHO SPECIAL PROGRAMME FOR RESEARCH
AND TRAINING IN TROPICAL DISEASES (TDR), WHO, GENEVA, SWITZERLAND**

**Invites applications for the post of
MEDICAL OFFICER (CLINICAL DEVELOPMENT)**

The World Health Organization (WHO) is an inter-governmental agency internationally recognized for its integrity and lasting achievements. Guided by humanitarian concerns, WHO works to direct and coordinate global and national efforts to improve the health of peoples throughout the world. To meet its objectives, WHO depends on staff members with special qualities of leadership, dedication and commitment.

The UNDP/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases (TDR) is a globally coordinated effort to bring the resources of modern science to bear upon the control of major tropical diseases.

TDR promotes development, production and testing of new products, with specific emphasis on their production and testing in developing countries.

TDR is seeking to hire a medical officer with experience in developing, producing and testing pharmaceuticals. The successful candidate will work as part of the Product Development Unit and will provide expertise and support related to clinical development, particularly in relation to disease endemic countries.

Applicants should have experience in pharmaceutical research and development, ideally in a major pharmaceutical company, including up-to-date knowledge of the clinical development of pharmaceuticals. Knowledge of tropical diseases would be an advantage. Medical degree is a requirement, as is an excellent knowledge of English or French, with a good working knowledge of the other language.

An attractive package of salary, international allowances, social security and statutory entitlements, is offered.

Letter of application and detailed curriculum vitae together with a recent photograph should reach the following office within three weeks of publication of this advertisement quoting reference "MPR/TDR" and the name of the journal in which this announcement appeared:

Personnel Officer
World Health Organization
Avenue Appia
1211 Geneva 27, Switzerland

APPLICATIONS FROM WOMEN ARE ENCOURAGED

Only candidates under serious consideration will be contacted.
(WHO Facsimile No. 791.07.46)

**INSTITUTE OF ZOOLOGY
LOWER VERTEBRATE
REPRODUCTIVE BIOLOGIST**

Applications are invited for a Post-Doctoral Research Scientist to join the Reproductive Biology Group to establish an international status research programme in lower vertebrate reproductive biology. The interests of the group range from physiological ecology to molecular biology and we seek someone with interests of comparable breadth. The successful applicant would receive start-up funding, access to animal facilities and technical support, funding for a Ph.D. student and access to well-equipped molecular biological, developmental biology and endocrine laboratories. (S)he would be expected to establish collaborative studies with the lower vertebrate collection within the Zoological Society and other scientists at the Institute (currently comprising 35 Post-Doctoral staff). The Institute of Zoology is a grant-aided Institute of the University of London. Salary on the University lecturer scale according to age and experience. Informal enquiries about the post and research scope of the Institute to Dr. Andrew Loudon (Tel. 071 722 3333 ext 841; Fax. 071 586 2870). Formal applications with full CV and names of three referees to:
Senior Personnel Officer, Zoological Society of London, Regent's Park, London NW1 4RY. Closing date: 20th February 1993.

**RESEARCH ASSOCIATES
ADHESION BIOLOGY GROUP**

The Upjohn Company is a recognized world leader in pharmaceutical research and development. Our new Adhesion Biology Group has openings available for research associates with experience in hybridoma techniques and monoclonal antibody production.

Under the direction of Donald C. Anderson, M.D., selected candidates will work in a stimulating, multi-disciplinary research environment at our modern facilities in Kalamazoo (a southwestern Michigan community located midway between Detroit and Chicago).

In addition to an excellent salary, Upjohn's benefit package reflects our commitment to developing and supporting initiatives which help employees balance the demands of work and family.

For confidential consideration, please submit your resume (refer to Position #136) to:

**Donald C. Anderson, M.D.
THE UPJOHN COMPANY
7000 Portage Road
Kalamazoo, MI 49001**

An equal opportunity,
affirmative action employer.

Upjohn

POSITIONS OPEN

ASSISTANT TO THE CHAIR and INSTRUCTOR OF PSYCHOPHARMACOLOGY—The University of Illinois College of Medicine at Peoria (UICOM-P) invites applications for the dual position of Instructor (50% time) and Assistant to the Chair of the Department of Basic Sciences (50% time). Responsibilities will include: (1) formulation and interpretation of academic/administrative policies and judgments; (2) representation of the Chair of the Department; (3) enhancement of relationships with institutions and agencies; (4) membership on committees; (5) assistance in recruiting faculty; (6) development of administrative procedures for maximizing academic achievements; (7) participation in teaching; and (8) implementation of biomedical research projects in neuroscience. The appointee will have a doctorate in a discipline pertinent to neuropsychopharmacology. Achievements will include publications in peer-reviewed scientific journals, experience in biostatistics, neurochemistry, intracerebral microdialysis and teaching. Other requirements for the position include: administrative experience in health-related programs and with professional personnel; experience in the utilization and theoretical aspects of research laboratory equipment and classroom instruction; and qualification for appointment in the UIC College of Medicine as an Instructor in a basic biomedical science. The dual position will be available February 15, 1993. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer and encourages applications from members of minority groups and women.* Send résumé and names of three references to: **Phillip C. Jobe, Ph.D., Chair, Department of Basic Sciences, University of Illinois College of Medicine at Peoria, P.O. Box 1649, Peoria, IL 61656.**

CHAIR, DIVISION OF PHARMACOLOGY UNIVERSITY OF MISSOURI-KANSAS CITY (UMKC) SCHOOL OF PHARMACY

The UMKC School of Pharmacy is currently seeking nominations or applications for the position of Chair, Division of Pharmacology. The educational and research initiatives of the division include basic and clinical pharmacology and toxicology.

Qualified applicants must possess a Ph.D. or equivalent degree in pharmacology or a closely related discipline with an exemplary record of accomplishment in pharmacological/toxicological research. Preference will be given to candidates with demonstrated leadership ability, management skills, an academic pharmacy background, and a record of extramural funding. This position is a tenure-track/tenured appointment, and candidates should be eligible at the **ASSOCIATE PROFESSOR/PROFESSOR** level.

Screening of applicants will begin immediately, and applications will be accepted until the position is filled. Applicants must submit curriculum vitae, description of research interests, and three letters of reference to:

**Robert W. Piepho, Ph.D., Dean
Chair, Search Committee
University of Missouri-Kansas City
School of Pharmacy
5005 Rockhill Road, KPB 103
Kansas City, MO 64110-2499
Telephone: (816) 235-1609**

University of Missouri-Kansas City is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—NMR

The Frederik Philips Magnetic Resonance Research Center of the Emory University Department of Radiology seeks a Ph.D. with NMR spectroscopy or imaging experience for a one- to two-year position. Understanding of spin behavior is essential. Knowledge of medicine, biology, biochemistry, computers, or analog electronics would be useful. Two 1.5 clinical imagers and a 30 cm, 200 MHz instrument are available. Emory's 800 bed tertiary care complex provides opportunity for clinical collaboration. Five Department of Radiology Ph.D. scientists and 1 M.D. are full-time NMR researchers. Qualified candidates please contact: **W. Thomas Dixon, Ph.D., Department of Radiology, Emory University School of Medicine, 1364 Clifton Road, Atlanta, GA 30322.** *Equal Opportunity—Affirmative Action Employer.*

POSITIONS OPEN

MOLECULAR ENDOCRINOLOGIST

POSTDOCTORAL POSITION available for July 1, 1993. Seeking Ph.D. molecular biologist to study human glycoprotein hormone signal transduction. Experience in analysis of receptor-ligand interactions and expression of recombinant proteins preferred. Send curriculum vitae and names of three references to: **Dr. Robert Lash, Room N3W50, University of Maryland School of Medicine, 22 South Greene Street, Baltimore, MD 21201.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study mRNA expression in postschismic brain for a 5-year NIH-funded project in progress. Experience in molecular biology techniques, e.g., Northern blot, *in situ* hybridization desired. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Kusum Kumar, Michigan State University (MSU), Department of Pathology, 620 East Fee, East Lansing, MI 48824 or FAX to 517-336-1053, Attention: Dr. Kumar.** *MSU is an Affirmative Action/Equal Opportunity Institution.*

POSTDOCTORAL POSITION BROWN UNIVERSITY Division of Biology and Medicine

Position available for individual interested in areas of protein structure-function, gene structure and regulation, protein-nucleic acid interactions, or molecular mechanisms of recombination. Previous experience with (or desire to learn) protein chemistry, nucleic acid biochemistry, DNA cloning, genetics or *in vitro* systems. Please send résumé with desired starting date and list of three references to: **Arthur Landy, Box G-3360, Brown University, Providence, RI 02912.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION is available to investigate intracellular signal transduction in platelets. Experiments will examine a cytoskeletal protein which is both a cAMP-dependent protein kinase substrate and a member of the Ras superfamily of GTP binding proteins. Recombinant DNA as well as traditional biochemical methods will be utilized. Send curriculum vitae and two letters of reference to: **Nancy Andrews, Center for Thrombosis and Hemostasis, CB #7015, 435 Burnett-Womack Building, University of North Carolina at Chapel Hill, NC 27599.**

POSTDOCTORAL POSITION IN CELLULAR/MOLECULAR ENDOCRINOLOGY. To investigate the mechanisms regulating secretion, differentiation and transdifferentiation of cells that release growth hormone and prolactin. Ongoing studies utilize both rodent and bovine pituitary cell models. Other projects involve elucidating the mechanisms by which the hypophyseal intermediate lobe regulates anterior pituitary function. Please send curriculum vitae along with names and telephone numbers of three references to: **Dr. L. Stephen Frawley, Department of Cell Biology and Anatomy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

POSTDOCTORAL POSITION available for an applicant with protein chemistry and molecular biology experience to join a pulmonary diseases laboratory for the study of lung development and repair of injury. Inquiries to: **Stephen L. Young, M.D., Professor of Medicine, Duke University Medical Center, Box 3177, Durham, NC 27710.** Telephone: 919-286-6926, FAX: 919-286-6824. *Duke University is an Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS Molecular and Cell Biology of the Heart

Postdoctoral positions are available to study control of gene expression in heart and vascular smooth muscle, in the newly formed Molecular Cardiology Section at the University of Cincinnati. A major interest of the group is to clone transcription factors and genes involved in heart development. Individuals with background in Cell and Molecular Biology are preferred. Please send résumé to: **Dr. M. Periasamy, Molecular Cardiology, M.L. 542, University of Cincinnati, College of Medicine, Cincinnati, OH 45267-0542.** *The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION in Molecular Biology. Immediate opening exists for a Ph.D. Molecular Biologist with experience in molecular cloning, sequencing and expression. This position at the **Igen Research Institute (IRI)** supports a program in biocatalysis. IRI is a growing non-profit research institution in downtown Seattle which has an interdisciplinary emphasis on biocatalysis. The open position also offers an interface with industrial biotechnology. Send curriculum vitae and telephone numbers of three references to: **Dr. Tramontano, President, Igen Research Institute, 130 Fifth Avenue N., Seattle, WA 98109.**

POSTDOCTORAL POSITION

Postdoctoral position available to study the molecular mechanism and control of a bacterial transposition reaction *in vivo* and *in vitro* using biochemistry, molecular biology and genetics (*Mol. Microbiol.* 5:2569, 1991 for review). Interested applicants should send curriculum vitae, summary of research experience and interests, and the names of three references to: **Dr. N. L. Craig, Department of Molecular Biology and Genetics, 615 PCTB, Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY. Full-time position available immediately to study the regulation and role of the fatty acid cytochrome P450 gene family in carcinogenesis, signal transduction, and human disease. Experience in molecular biology is necessary. Salary is competitive and fringe benefits include medical insurance and retirement. Submit curriculum vitae, letters of recommendation and research papers to: **Office of Human Resources, c/o Dr. James P. Hardwick, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, OH 44272.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION MOLECULAR ONCOLOGY PROGRAM

Postdoctoral position available in research laboratory investigating mitogenic pathways mediated by protein tyrosine kinases. Interested candidates should forward curriculum vitae and 3 letters of recommendation to: **Gary D. Kruh, M.D., Ph.D., c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** Telephone inquiries can be made by calling Dr. Kruh at (215) 728-5317. *Equal Opportunity Employer.*

FOX CHASE
CANCER CENTER

POSTDOCTORAL POSITION available immediately for research on role of nuclear regulatory proteins (e.g. CREB, Jun) in mediating regenerative responses of neurons to axon injury. Collaborative work on cell biology of growth cones also available. Background in cell and/or molecular biology preferred. Send curriculum vitae, statement of research experience and interests, and names of three references to: **Dr. Daniel J. Goldberg, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP PROFESSIONAL ASSISTANT

A Postdoctoral Fellowship/Professional Assistant position is available immediately in the Secretary Process Research Programme in the Department of Pharmacology for a candidate with experience in recombinant DNA and DNA-sequencing techniques. We are interested in a person who can work independently on a project involving the cloning of a gene of a novel Ca^{2+} -dependent protein. The position is for a year, renewable for a further two years. Salary will be commensurate with experience. Interested candidates are invited to send curriculum vitae and names of 3 referees by February 15, 1993, to: **Dr. J.-M. Trifaró, Department of Pharmacology, Faculty of Medicine, University of Ottawa, 451 Smyth Road, Ottawa, Ontario, Canada K1H 8M5, FAX: (613) 731-8949.** *We support Equal Opportunity Employment.*

Director for the Center for Tropical Forest Science

The Center for Tropical Forest Science of the Smithsonian Tropical Research Institute is a collaborative and interdisciplinary program for natural and social science research into tropical forest ecology and management. Its main activities are: 1) linking permanent, intensive research sites in tropical forest ecology, management, economic value, and regeneration; 2) creating information exchange systems, including workshops, publications, and computer software, that enhance data collection, storage, and dissemination; 3) running a training program for forest scientists and managers from tropical countries; and 4) fostering communication of relevant research results to government officials setting tropical forest policy. The Center's program currently includes research sites and collaborating institutions in Panama, Bolivia, Malaysia, Thailand, India, and Sri Lanka.

The Center will hire a director to administer its programs from its headquarters in Panama City, Republic of Panama or Washington, D.C. The director's duties will include: 1) fund raising, including writing proposals and travelling to meet with funding organizations; 2) maintaining close ties with collaborating institutions; 3) stimulating new collaborations to initiate forest research in tropical countries; 4) overseeing the creation of a training program in tropical forest ecology, economics, and management aimed at students from tropical countries; and 5) developing an interdisciplinary research program in tropical forest science; 6) representing the CTFS before international organizations concerned with forestry policy and research. Applicants are expected to have demonstrated capacity for dynamic leadership, innovative research, strategic planning, effective administration and a comprehensive understanding of tropical forest biology. The position requires the ability to interact with international donor agencies, national government commercial organizations and universities. Salary will be between \$56,627 and \$73,619 according to experience, and may include home leave, housing and educational allowances.

Interested candidates should send a letter of interest and a Curriculum Vitae to: Dr. Ira Rubino, Director, STRI Unit 0948, APO AA 34002-0948, USA.

Assistant Director, Scientific Support Services

Following considerable diversification and growth of its scientific research, the Smithsonian Tropical Research Institute (STRI) has recently reorganized its administration. The above position has been created to coordinate and oversee the running of all scientific facilities, marine and terrestrial, as well as to supervise all scientific support personnel. Units include 3 major laboratories; 1. Naos, (marine and molecular biology), 2. Barro Colorado Nature Monument (tropical forest research), and 3. Tupper Research and Conference Center (including the Center for Tropical Paleocology, the Center for Tropical Plant Eco-Physiology, and the Center for Tropical Forest Science). STRI has a permanent staff of 30 scientists, and about 400 visiting scholars, pre and post doctoral fellows, and students annually. Facilities include a tower crane for canopy research, a new 100' research vessel, state-of-the-art molecular biology and plant physiology laboratories and marine laboratories on both Pacific and Atlantic coasts. The selected person is expected to have considerable experience in the administration of a scientific research institute, a strong background in natural sciences, with at least a masters degree, and excellent interpersonal skills, to interact with a diverse array of scientific and administrative staff. The person selected will not have a personal research agenda but will be expected to participate in the discussions of STRI's advisory scientific council, and to translate decisions of the director and the council to the scientific support staff, and to oversee their implementation. The incumbent will be responsible for coordinating and defending a budget so that the scientific facilities are developed in response to scientific goals and planning. The position will be at the level of IS14 (salary range \$56,627-\$73,619) and may include home leave, housing and educational allowances. Candidates should send a curriculum vitae and the names of 3 references to: Dr. Anthony G. Coates, Deputy Director, STRI Unit 0948, APO AA 34002-0948, USA.

SEARCH REOPENED CHAIR, DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

Applications and nominations are invited for the Chair, Department of Physiology and Biophysics of the UMDNJ-Robert Wood Johnson Medical School. The search has been reopened and seeks an individual with a record of outstanding research accomplishments and high scholarly achievement; M.D. or Ph.D. Robert Wood Johnson Medical School is located in Piscataway, N.J., approximately forty-five minutes from NYC.

Nominations and applications with CV and potential references should be forwarded by February 18, 1993 to **Sidney Pestka, M.D., Chair, Search Committee, UMDNJ-RWJMS, 675 Hoes Lane, Piscataway, NJ 08854-5635. Telephone: (908) 463-4567; FAX (908) 463-5223.** UMDNJ, New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.



NATIONAL INSTITUTE OF ALLERGY
AND INFECTIOUS DISEASES
NATIONAL INSTITUTES OF HEALTH

Post-Doctoral Fellowship Molecular Biology of HIV

The Laboratory of Immunoregulation, has available an intramural postdoctoral research fellowship to study the molecular biology of HIV. The main emphasis will be on cellular factors involved in the Rev axis of HIV autoregulation. Additional interests will include determinants of tropism, intracellular molecular interactions between HIV and macrophages and other related areas. Candidates must have an M.D. or Ph.D. A strong background in molecular biology and/or protein chemistry is preferred. Meets requirements for NIH HIV Loan Repayment Program. The position will be available in April 1993. Please forward curriculum vitae and the names of three references to:

Dr. Andrew I. Dayton
Laboratory of Immunoregulation
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Bldg. 10, Room 6A08
9000 Rockville Pike
Bethesda, MD 20892



NIH is an Equal Opportunity Employer

Flow Cytometry Specialist

CellPro, Incorporated is an exciting, young biotechnology company focused on developing, manufacturing, and marketing affinity cell separation systems for use in therapeutic, research, and diagnostic applications. Continued expansion has created an outstanding opportunity to join our Seattle-area firm.

Our successful candidate will be responsible for operating and maintaining Flow Cytometry equipment. This person will also train CellPro employees in flow cytometry methods and participate in research projects using cytometry equipment. We are seeking a professional with 8 years laboratory experience, including 5 years in a flow cytometry lab.

In addition to our leading technology and the Pacific Northwest lifestyle, CellPro offers competitive salaries and an excellent benefit package. For immediate consideration, please send or fax your resume to:



Human Resources
CellPro, Incorporated
22322-20th Ave. S.E., Suite #100
Bothell, WA 98021-8446
Fax: (206) 485-4787

We are an Equal Opportunity Employer.

ENDOWED CHAIR

The Texas A&M University Health Science Center is seeking nominations or applications for a well-endowed Chair and Professorship established in the Health Science Center. It is anticipated that most of the funds generated by the endowment will be available to support the research programs of the Holder of the Chair. Applicants or nominees should have a strong background in chemistry or biochemistry and should have a vigorous research program involving applications of chemistry or biochemistry to medically important problems. Research interactions would be anticipated with one or more of the contiguous basic medical sciences departments (Medical Biochemistry & Genetics, Medical Microbiology & Immunology, Medical Physiology, Medical Pharmacology & Toxicology, Medical Anatomy, and Medical Pathology). Areas of current research in the Health Science Center include bacterial and parasitic pathogenesis, molecular biology, molecular genetics, microcirculation, ocular pharmacology, oncogenes, and the neurosciences. Additional research interactions are encouraged with investigators in other well regarded Texas A&M University departments, including Chemistry, Biochemistry and Biophysics, Biology, several departments in the College of Veterinary Medicine, and the intercollegiate faculties of Genetics, Cell Biology, Nutrition, and Toxicology.

Applications should include a curriculum vitae, and the names of three references. Nominations should include a curriculum vitae, if possible. Applications or nominations will be accepted until the position is filled. Applications or nominations should be sent to Dr. Garret Ihler, Search Advisory Committee, Department of Medical Biochemistry & Genetics, Texas A&M University Health Science Center, College Station, TX 77843-1114.

Texas A&M University is an Equal Opportunity Affirmative Action Employer/Educator

NATIONAL INSTITUTE OF CANCER

NATIONAL INSTITUTES OF HEALTH

POSTDOCTORAL RESEARCH FELLOWSHIP

available to study the effects of DNA damaging agents on cell cycle control. These studies will include the identification of protein kinases that detect damaged DNA or relay such information to cyclin/cdk complexes. Background in molecular biology and protein chemistry preferred. U.S. citizenship required. Send curriculum vitae and names of three references to:

Dr. Kurt W. Kohn
Laboratory of Molecular Pharmacology
National Cancer Institute
National Institutes of Health
Bldg. 37, Room 5C25
9000 Rockville Pike
Bethesda, MD 20892.



NIH is an Equal Opportunity Affirmative Action Employer



UNIVERSITY OF DUBLIN

TRINITY COLLEGE

Chair of Microbiology (1975)

Applications are invited for appointment to the Chair of Microbiology (1975) in the Faculty of Science. The Department has established excellence in research on microbial pathogenesis and infection and immunity, with marked strengths in microbial and molecular genetics, bacterial membranes and cell surfaces and molecular virology. Other research areas include applied and environmental microbiology and immunology. The Department has attracted significant grants for research from national, European Community and international bodies. There is a significant association in research with the Unit of Clinical Microbiology, Faculty of Health Sciences.

The Department of Microbiology's main teaching contribution is to its Honors course leading to a B.A. (Moderatorship) in Science. It also has major teaching commitments, in which the Unit of Clinical Microbiology participates, to the Schools of Medicine and Dental Science in the Faculty of Health Sciences and to the School of Pharmacy in the Faculty of Science.

Applicants, scientifically or medically qualified, will be expected to provide academic leadership and to have a distinguished reputation and established research record in one of the constituent disciplines of the subject.

Further particulars of the appointment, including details of salary and other benefits, may be obtained from the College Secretary, West Theatre, Trinity College, Dublin 2, Ireland (Tel: +353-1-7021123. Fax: +353-1-710037) to whom formal applications may be sent, before 19 February 1993

Trinity College is an Equal Opportunity Employer

NATIONAL INSTITUTES OF HEALTH

RESEARCH FELLOWSHIP available immediately to study growth-control genes activated by genotoxic stress. Studies will focus on the role of the p53 tumor suppressor and other factors involved in the activation of cell-cycle checkpoints in mammalian cells. Related stress responses in both cellular and viral (HIV-1) genes may be investigated. Salary is \$25,000 to \$42,000 per year based on 0-5 years of postdoctoral experience. Experience in molecular biology.

*Send curriculum vitae
and names of 3 references to:*

Dr. A.J. Fornace Jr.
**Laboratory of Molecular
Pharmacology**
Building 37, Room 5C09
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892



NIH is an Equal Opportunity/Affirmative Action Employer

TUFTS UNIVERSITY

Director Center for Environmental Management

Tufts University is seeking applicants for Director of the Center for Environmental Management to begin as early as July, 1993. The Center, established 8 years ago, has an operating budget of nearly \$4.5M, a staff of 25, and funds 35 university-wide research projects in broad areas of environmental sciences, which includes health and ecological sciences, engineering and policy.

The Director will provide leadership and direction to the Center, whose expressed mission is to promote environmental sustainability by developing and supporting innovative university-wide programs in research, policy, education and outreach, and collaborating with public and private sector groups. The Director will be responsible for developing and maintaining support and funding for Center programs; fostering an interdisciplinary approach; evaluating strategic directions; and overseeing development and integration of the Center's diverse programs. The successful applicant may also hold a joint faculty position in an appropriate University department, tenure track or not, depending on the qualifications and desires of the person. The faculty rank would be commensurate with teaching and research experience.

Candidates must have a demonstrated background in and commitment to environmental science, technology, policy, or management; demonstrated leadership and fund raising skills; considerable experience in managing organizations involved in science and policy; and experience in educational and/or research management. Preference will be given to someone with a PhD or equivalent advanced degree in an environmentally related field of biomedical or physical science, engineering, policy, or in exceptional cases, appropriate experience. Applicants must demonstrate an ability to work across disciplinary boundaries.

Send curriculum vitae and names of three references to Search Committee Chairman, Melvin Bernstein, Vice President for Arts, Sciences, and Technology, Ballou Hall, Tufts University, Medford, MA 02155. Screening of applications will begin February 8, 1993. Tufts University is an Affirmative Action/Equal Opportunity Employer, M/F/D/V.

WE ALWAYS ASK WHY.

At GEO-CENTERS, INC., we don't take anything for granted.

Asking questions and pursuing technology to its limits has led to exciting advances in a wide variety of fields; such as chemical, optical, biomedical and material sciences.

Our broad base of expertise allows us the flexibility to move quickly into new areas of inquiry. If you're stimulated by provocative science and applications-oriented research and development, you're ready for all that we have to offer.

(Dayton, OH)
CODE 2288

A POSTDOCTORAL
LEVEL scientist is

sought to assist in a toxicological research effort designed to measure the

absorption qualities of various chemicals through the skin. The main

focus will be to determine chemical permeability constants *in vivo* on six species,

whole animal investigations, identify physiological differences by using statistical analysis and apply

PB-PK modeling to the process. The ideal candidate will possess a recent PhD in toxicology, molecular biology,

pharmacology, or related field with a demonstrated knowledge of dermal toxicology.

(Washington, DC)
CODE 2289

A SENIOR LEVEL

IMMUNOLOGIST is sought to assume a leadership role

in the development of novel immunologically-based biosensor

technologies. Candidates should possess a broad scientific background, with a

PhD in immunochemistry or a related field, with a minimum of five years of demonstrated

laboratory experience in fluorescence and optics for sensor applications. Candidates should possess previous

project and personnel management experience, with consummate written and oral communications skills. Previous

experience in successfully securing sources of research funding is preferred.

(Various Locations)
CODE 2240A

BS/MS level staff members are being

sought to support our research and development

efforts throughout the country.

Fields of specific interest include molecular biology, microbiology, physiology,

and biochemistry. Candidates should possess a minimum of two years of post-graduate

practical experience. Applicants should specify their geographic preferences, if any, and their specific

fields of interest and expertise.

In our supportive, challenging environment, you'll also enjoy a highly competitive salary, a generous benefits package and relocation assistance. **U.S. CITIZENSHIP OR**

GREEN CARD IS REQUIRED. Applicants selected may be subject to a security investigation and must meet eligibility requirements for access to classified information.

Candidates should forward their qualifications, salary requirements and references to:

**GEO-CENTERS, INC., 10903 Indian Head Highway,
Fort Washington, MD 20744,**

Attn: Deborah Hall-Greene/Code _____.



GEO-CENTERS, INC.

GEO-CENTERS, INC.
is an Equal Opportunity/
Affirmative Action Employer.
(Principals Only)

TARGET YOUR RECRUITMENT EFFORTS WITH **SCIENCE** BONUS DISTRIBUTION

SCIENCE offers you more bonus distribution opportunities at scientific meetings and conferences than any other publication in the field - another way to reach the job candidates you're looking for in the hard-to-reach markets you need.

1993 **SCIENCE** BONUS DISTRIBUTION SCHEDULE

'93 Miami Bio/Technology Winter Symposium
January 1 Issue - Deadline: Dec. 14

HPCE (High Performance Capillary Electrophoresis)
January 8 Issue - Deadline: Dec. 21

Biophysical Society
February 12 Issue - Deadline: Jan. 26

PITTCON (The Pittsburgh Conference)
February 26 Issue - Deadline: Feb. 9

Society of Toxicology
March 5 Issue - Deadline: Feb. 16

ACS (American Chemical Society)
March 12 Issue - Deadline: Feb. 23

Experimental Biology (FASEB)
March 26 Issue - Deadline: March 9

ASM (American Society for Microbiology)
May 7 Issue - Deadline: April 20

AAI/CIS
(American Association of Immunologists/
Clinical Immunology Society)
American Association for Cancer Research
May 14 Issue - Deadline: April 27

ASBMB
(American Society for Biochemistry
and Molecular Biology)
May 28 Issue - Deadline: May 11

International Congress of Virology
July 23 Issue - Deadline: July 6

Science Innovation '93
July 30 Issue - Deadline: July 13

International Genetics
August 6 Issue - Deadline: July 20

ACS Fall Meeting
August 13 Issue - Deadline: July 27

NIH Research Week
September 17 Issue - Deadline: Aug. 31

American Society of Human Genetics
Lab Expo & Conference
October 1 Issue - Deadline: Sept. 14

Biotechnica
October 8 Issue - Deadline: Sept. 21

Human Genome
October 15 Issue - Deadline: Sept. 28
October 22 Issue - Deadline: Oct. 5

Neuroscience
October 29 Issue - Deadline: Oct. 12

Medica '93
MAC
November 5 Issue - Deadline: Oct. 19

Salon du Laboratoire
November 19 Issue - Deadline: Nov. 2

ASCB (American Society for Cell Biology)
December 10 Issue - Deadline: Nov. 22

For more information on how to make **SCIENCE
classifieds work for you, contact
Millie Munoz-Cumming at (202) 326-6555**



GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

The Glaxo Institute in Geneva is an international centre for the discovery of novel molecular mechanisms that could be used to treat serious diseases. In particular, research is focused on the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a

Post-Doctoral SCIENTIST to study the role of protein tyrosine phosphatases in signal transduction

The ideal candidate will have research experience in receptor-linked signalling pathways involving tyrosine phosphorylation/dephosphorylation. The successful applicant will investigate protein tyrosine phosphatases, their interactions with receptor tyrosine kinases and associated signal transduction events. Informal enquiries may be made to Dr. Steve Arkinstall (+41 22 706 98 42).

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live. The Institute for Molecular Biology is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to : Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology, 14 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.

SCIENTISTS

for Fetal Cell Isolation Project

MediGene, Inc., a rapidly growing genetic services company, is seeking to significantly expand its core team of scientists involved in fetal cell isolation. Successful candidates will join a multi-disciplinary team of scientists dedicated to discovery of novel approaches to this project. We are seeking energetic investigators in the fields of in-situ hybridization, separation methodologies and assay development. Qualifications:

Molecular Biologist/Geneticist: Ph.D.-level scientist to develop in-situ technology for the detection of genetic diseases. Strong background in cyto- or molecular genetics with a minimum 2 years experience with FISH desired. Knowledge of cell biology a plus.

Immunologist/Cell Biologist: Ph.D.-level scientist to develop cell isolation procedures. Strong background in cell immunology or hematology, extensive knowledge of cell surface markers and adhesive molecules. Blood cell fractionation and rare cell isolation experience a plus.

Postdoctoral Scientist: To develop assays for recognition of tissue of origin. Strong background in immunology with experience in immunocytochemistry and/or immunoassay development.

MediGene is located in southern Westchester County, with close proximity to New York City while enjoying country-like setting of suburbia. We offer excellent salary and benefits package as well as the opportunity to advance with a rapidly expanding organization. For confidential consideration, please submit your curriculum vitae and three references to:

MediGene, Inc.

Personnel Director
1 Executive Boulevard
Yonkers, New York 10701
An Equal Opportunity Employer

Laboratory Director Cell Culture/Production

Genetic Therapy, Inc., a leading biotechnology company, is working to develop retroviral mediated and other gene transfer methods applicable to gene therapy. We are searching for a Laboratory Director with experience in the pharmaceutical industry who will supervise the operations of a tissue culture core laboratory performing transfections, transductions, cloning of selected cell cultures; and QA assays as well as the scale-up and large-scale operations for the production of viral vector supernatants. Experience in a pharmaceutical setting is essential. A Ph.D. degree in a related field is required. Knowledge or experience with retroviruses and/or adenoviruses is helpful. GTI offers a stimulating and challenging research environment, with competitive salaries and benefits. Please send a resume, along with the names and addresses of two references to:



Genetic Therapy, Inc.
Human Resources - LD
19 Firstfield Road
Gaithersburg, MD 20878

GTI is an equal opportunity employer.

Information Systems Manager

Genetic Therapy, Inc., a leading biotechnology company, is developing products for human gene therapy. We are currently looking for an experienced person to manage the Company's activities in the area of computer systems and information sciences. Some of these systems have to be developed. These include: databases of vector inventory, QA testing, information systems to track development of vectors and cell culture substrates, patent inventories, DNA database as well as administrative systems of the Company. This position requires relevant experience in the field and a demonstrated record of identifying and implementing required computer hardware and software packages, hopefully in a biotech or pharmaceutical setting. GTI offers a stimulating and challenging research environment, with competitive salaries and benefits. Please send a resume, along with the names and addresses of two references to:



Genetic Therapy, Inc.
Human Resources - ISM
19 Firstfield Road
Gaithersburg, MD 20878

GTI is an equal opportunity employer.

Hahnemann University

Philadelphia, Pennsylvania

PROVOST

Hahnemann University invites nominations and applications for the position of Provost.

THE UNIVERSITY

Hahnemann University is a modern academic health center in central Philadelphia with more than 2000 students enrolled in its School of Medicine, Graduate School, and School of Health Sciences and Humanities. Hahnemann University Hospital is a 616-bed, level I Trauma Center with Medevac capabilities.

THE POSITION

The Provost reports to and is responsible to the President. The Provost represents the President on all University matters and is the Acting President when the President is not on campus. The Provost has responsibility for the programs, space facilities, budgets, faculty, staff and students in the academic programs. The Provost serves on the Senior University Administrative Team along with the President, Chief Operating Officer, and Chief Financial Officer.

The Provost must exert visible leadership as the University engages in activities with the surrounding communities. In addition, the Provost is responsible for recruitment of distinguished faculty and the development of academic programs that transcend traditional walls. Experience in the development of research programs of many sorts is essential.

QUALIFICATIONS

Candidates must have an earned Doctorate and academic credentials and achievements sufficient to merit a full professor's tenured faculty appointment within the University. Significant administrative expertise within a complex academic health center or a university is desirable. Also required is demonstrated competence in fiscal responsibility and budget management. It is desired that candidates should have demonstrated skill with and commitment to gender, multi-ethnic and multi-cultural issues, as well as commitment to the needs of students and student welfare. Service as a Dean, Chair, or equivalent is preferred.

APPLICATIONS / NOMINATIONS

Applications and nominations, including letter of interest and current curriculum vitae, should be forwarded by March 1, 1993 to:

John R. Hogness, M.D.
Interim Provost

HAHNEMANN UNIVERSITY
Mail Stop 490, Broad and Vine Streets
Philadelphia, PA 19102-1192

Hahnemann University is an Equal Opportunity, Affirmative Action Employer and invites and encourages applications and nominations from women and under-represented minorities.

NATIONAL INSTITUTE OF ALLERGY
& INFECTIOUS DISEASES
NATIONAL INSTITUTES OF HEALTH

POST- DOCTORAL FELLOWSHIP

SCRAPIE/ PRION PROTEIN/ NEURODEGENERATIVE DISEASE. A postdoctoral fellowship is available to study the biochemistry and cell biology of scrapie-associated prion protein accumulation as a model of neurodegenerative amyloidosis. The current research focuses on the mechanism of action of recently identified inhibitors of amyloidogenic prion protein accumulation in cell culture. These studies should suggest therapeutic strategies for treating transmissible spongiform encephalopathies (TSE) and other amyloidoses such as Alzheimer's diseases.

This effort will be part of broad-based departmental studies of neurodegenerative diseases resulting from infections by TSE agents and viruses such as HIV, rabies and neurotropic murine retroviruses.

The preferred candidate will have a doctorate and background in one or more of the following: protein biochemistry, ligand binding studies, intracellular membrane trafficking, conformational analysis, glycosaminoglycans, the TSE field. Salary range: \$25,000-35,000 per year.

To apply send curriculum vitae, or for further information, call or write to:

Byron Caughey, Ph.D.
Laboratory of Persistent Viral
Diseases
National Institute of Allergy &
Infectious Diseases
National Institutes of Health
Rocky Mountain Laboratories
Hamilton, MT 59840
Telephone: (406) 363-3211



NIH is an Equal Opportunity Employer

Postdoctoral Research Fellowships Joslin Diabetes Center Harvard Medical School

Postdoctoral research positions are available in Joslin Diabetes Center laboratories at various starting times. Investigators and project areas include the following:

S. Bonner-Weir	Mechanisms of islet growth and differentiation
S. Bursell	Retinal blood flow mechanisms and diabetic retinopathy
M. Hattori	Genetic basis for diabetes in NOD mice
R. Jackson	Immunology of Type 1 diabetes
C.R. Kahn	Mechanisms of insulin action
G.L. King	Vascular cell biology and diabetes complications
A. Krolewski	Genetic basis for diabetes complications
M. Lipes	Transgenic models and the pathogenesis of diabetes
M. Loeken	Effects of diabetes on embryonic gene expression
E. Maratos-Flier	Mechanisms of reovirus-cell surface interactions
C. Rhodes	Insulin biosynthetic mechanisms
H. Riedel	Genetic dissection of insulin and PKC signalling in yeast
S. Shoelson	Structural basis for insulin and receptor signalling
D.C. Simonson	Clinical physiology of diabetes and its complications
R.J. Smith	IGF and insulin mechanisms of action and interaction
M.J. Spiro	Collagen synthesis and diabetes complications
R.G. Spiro	Biochemical basis of diabetic renal disease
G.C. Weir	Islet function in diabetes and transplantation
M. White	Role of IRS-1 in insulin signalling

Please send resume and reference letters plus information on starting date and specific lab(s) of interest to:

Ms. Phyllis Nelson
Fellowship Office/Research Division
Joslin Diabetes Center
One Joslin Place
Boston, MA 02215

Joslin Diabetes Center is an Equal Opportunity/Affirmative Action Employer.



Wellcome

WHEN YOU WANT TO CONSULT WITH THE EXPERTS, JUST WALK DOWN THE HALL.

At Burroughs Wellcome Co., we are proud of the talented and dedicated individuals who have made us what we are today—one of the leading research-based pharmaceutical firms in the world. Amazing things happen in an environment of mutual respect and support. Come work with our experts; join us at Burroughs Wellcome Co.

Research Scientist III/IV

This individual will radiolabel monoclonal antibodies for cancer radioimmunotherapy. Position will be filled at the Research Scientist III or Research Scientist IV level. The level of responsibility to be assigned will depend on the individual applicant's background and experience level.

Research Scientist III: Candidates must have a BS in Biology or Chemistry or a related discipline or a four-year college curriculum with a major concentration in Biology/Chemistry or a related discipline PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Pharmacy degree PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Master's degree in a related discipline PLUS five years of experience in nuclear pharmacy/radioimmunotherapy OR a Ph.D. in nuclear pharmacy, biochemistry or a related discipline PLUS two years of experience in nuclear pharmacy/radioimmunotherapy. Candidates selected for interview will take an on-site writing assessment.

Research Scientist IV: Candidates must have a BS in Biology or Chemistry or a related discipline or a four-year college curriculum with a major concentration in Biology/Chemistry or a related discipline PLUS nine years of experience in nuclear pharmacy/radioimmunotherapy OR a Pharmacy degree PLUS nine years of experience in nuclear pharmacy/radioimmunotherapy OR a Master's degree in a related discipline PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Ph.D. in nuclear pharmacy, biochemistry or a related discipline PLUS four years of experience in nuclear pharmacy/radioimmunotherapy.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating POS. #64382-29 in your cover letter, by **March 1, 1993**, to: **Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at **(919) 248-8347.**



Wellcome

BURROUGHS WELLCOME CO.

An Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP

A postdoctoral fellowship is available to study signal transduction for cytokines and hormones including tumor necrosis factor- α , interleukin-1 and activin. Signaling will be assessed with respect to models of differentiation and neoplasia. Salary is \$30,000 per year. Please send curriculum vitae to:

Dr. Richard Kolesnick
Head, The Laboratory of Signal Transduction
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021

POSTDOCTORAL RESEARCH FELLOW IN SPORTS MEDICINE: Opportunity to develop chromatography and mass spectrometry skills in the study of anabolic steroid and anti-catabolic drug pharmacokinetics and pharmacodynamics. Research lab is affiliated with IOC- and CAP FUDT-accredited laboratory. A Ph.D. in analytical, organic, or biological chemistry required. Previous experience in HPLC, GC, or isolation of drugs from cell culture and biological fluids preferred. Send curriculum vitae, a brief summary of research interests and experience, and the names, addresses, and telephone numbers of three references to: **L. D. Bowers, Sports Medicine Drug Identification Laboratory, Department of Pathology, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46202-5210.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

A position is available for a scientist interested in studying **synaptic signal transduction mechanisms** in the Laboratory of Molecular Pharmacology at the Guthrie Research Institute. The Institute offers outstanding facilities and opportunities for both collaborative and independent work in a supportive environment. This position requires experience in neuroscience, cell biology, molecular biology, pharmacology or biochemistry. Candidates should send curriculum vitae and two letters of reference to: **Dr. Robert S. Aronstam, Director, Guthrie Research Institute, Guthrie Square, Sayre, PA 18840.**

POSTDOCTORAL FELLOWSHIP. Available immediately for molecular biologist with recent Ph.D. or M.D. to work as part of an interdisciplinary team investigating cellular receptors involved in cell motility. Applicants should have experience in molecular cloning techniques; experience in biochemistry helpful. The appointment is for two years with an opportunity for career advancement.

Please send curriculum vitae including name and addresses of three references to: **Douglas Cines, M.D., Hematology-Oncology, 7 Silverstein Pavilion, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104.**

POSTDOCTORAL FELLOWSHIPS

Two positions are available for studies of the biochemistry and molecular biology of the regulation of isoprenoids and sterols. Of particular interest are studies on transcriptional control of squalene synthase and regulation of prenylation of proteins. Applicants should have a background in molecular biology and biochemistry and an M.D. or Ph.D. degree. Support is available for at least 3 years. Please send curriculum vitae to: **Dr. Ishaiah Shechter, Eleanor Roosevelt Institute, 1899 Gaylord Street, Denver, CO 80206.**

U.S. NAVY MEDICAL SERVICE CORPS OFFICERS

The U.S. Navy has openings for Ph.D.-level research positions as active duty naval officers. The persons selected will conduct basic and applied research on biochemical problems for the Navy. Applicants must be versatile, willing to relocate, and pass minimum physical and medical requirements. Requirements include Ph.D.-level training in biochemistry, forensic toxicology, molecular biology, pharmacology, toxicology, or analytical chemistry. A Master's level clinical chemist will also be considered. Pay and allowances vary, but start in the \$40,000 range plus benefits. Contact a Navy Recruiter or send a résumé to: **Captain R. L. Hilderbrand, MSC, USN, OCDEP @S. RM.25E 549, Pentagon, Washington, DC 20301-1515.**

POSITIONS OPEN

POSTDOCTORAL FELLOW. Ph.D. (immunology or cell biology) wanted to join laboratory studying the role of proteases in processing of antigens in the MHC class II antigen presentation pathway. Send curriculum vitae and references to: **Stephanie Diment, Ph.D., Michael Heidelberger Division of Immunology, Department of Pathology, New York University Medical Center, 550 First Avenue, New York, NY 10016.**

POSTDOCTORAL RESEARCH position available in receptor molecular biology, protein engineering and biochemistry. Send curriculum vitae and at least three references to: **P.E. Kolattukudy, Ohio State Biotechnology Center, 1060 Carmack Road, Columbus, OH 43210-1002.** *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 RESEARCH POSITION MEMBRANE SYNTHESIS DURING THE CELL CYCLE

A position is available to study the mechanisms of membrane biogenesis in a macrophage cell line. The ongoing research is focused on the biochemical signals that stimulate the genetic expression phosphocholine cytidyltransferase, the enzyme which regulates membrane phosphatidylcholine synthesis, and cell cycle control of the posttranslational modification of cytidyltransferase activity. Techniques routinely used include tissue culture, northern, southern and western blots, DNA sequencing, library screening, protein expression using baculovirus vectors, PCR-mediated mutagenesis, metabolic labeling, enzymology, and immunoprecipitation. Interested candidates with a recent Ph.D. degree should send curriculum vitae to: **Dr. Suzanne Jackowski, Biochemistry Department, 332 North Lauderdale, Memphis, TN 38101.** *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE BIOCHEMISTRY/IMMUNOLOGY

Research group studying molecular and clinical aspects of drug-induced blood dyscrasias is seeking a Ph.D. Research Associate with training in biochemistry to complement current research program. Understanding of immunology is essential and competence in molecular genetics desirable. Applicants with at least one or two years of postdoctoral experience preferred, but we will consider well qualified recent recipients of Ph.D. degree. Newly constructed Blood Research Institute on academic medical center campus provides exciting research environment. Send résumés and particulars to: **Richard H. Aster, M.D., Senior Investigator, Blood Research Institute, The Blood Center of Southeastern Wisconsin, Inc., 8733 Watertown Plank Road, Milwaukee, WI 53226.** *Equal Opportunity Employer.*

DIRECTOR OF HIGH FIELD PROTEIN NMR FACILITY

Candidates must have postdoctoral experience in high field NMR studies of proteins to oversee the operation, data accumulation, and data analyses for a high field NMR facility being established in the Department of Biochemistry at Kansas State University (KSU). This is a non-tenure-track position; the facility will operate on a fees-for-service basis. The Agricultural Experiment Station and College of Arts and Sciences are providing a salary for a continuous 9-month academic-year appointment and a summer appointment in the first two years; subsequently, the summer salary will need to be covered by facility fees. Facility equipment: a 500 MHz NMR with 3-channel system and 3D heteronuclear capability, separate work station, molecular graphics computer. It is anticipated that this appointment will begin in August 1993. Candidates should send their résumé, including the names and addresses of three individuals who can supply reference letters, to: **Dr. Thomas E. Roche, Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506.** *KSU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOLOGY SCIENCE EDUCATOR

The Department of Biology at **Southwest Missouri State University (SMSU)** has extended its search for a tenure-track position at the **ASSISTANT PROFESSOR** rank. Starting date is August 1993. Applicants must have an earned doctorate in Biology or Science Education, successful college teaching experience, and provide evidence of ability to advise teacher education students, coordinate the department's teacher education program, teach introductory-level and upper division courses in biology, and direct graduate student research. The successful candidate will be expected to seek outside funding to support an active research program and in-service activities in Science Education. Applicants should send curriculum vitae, college transcripts, and the names, addresses, and telephone numbers of three references by February 15, 1993, to: **Dr. Steve Jensen, Biology Science Educator Search Committee, Department of Biology, Southwest Missouri State University, Springfield, MO 65804-0095.** *SMSU is an Affirmative Action/Equal Opportunity Employer.*

BIOLOGY—A two-year position will be available August 1993 to **TEACH** introductory and non-majors courses. We seek an individual with a broad background and demonstrated teaching interest and ability. Candidates with experience in developing computer modules for teaching biology will be given preference. Send curriculum vitae, three reference letters, and graduate transcripts to: **Dr. Glen Wurst, Biology, Allegheny College, Meadville, PA 16335.** Review of credentials begins February 1, 1993. *Equal Opportunity Employer.*

MOLECULAR/DEVELOPMENTAL NEUROBIOLOGY AT NIH

Denes V. Agoston, M.D.

POSTDOCTORAL POSITION is presently available for candidates with strong background in molecular biology to study developmental expression of phenotypic-specific genes. **LDN, NICHD, NIH, 9000 Rockville Pike, Building 36; Room 2A21, Bethesda, MD 20892.** FAX: (301) 402-3149. *Equal Opportunity Employer.*

Computer Sciences Corporation in North Carolina seeks a **SCIENTIFIC PROGRAMMER** with four or more years of experience to support molecular modelling at the National Institute of Environmental Health Sciences. A Master's Degree (life sciences/chemistry), UNIX programming skills and molecular modelling experience are **REQUIRED**. Good communications skills are necessary. Résumé to: **CSC (Attention: D. Rogers), 100 Capitola Drive, Suite 300, Durham, NC 27713, or via FAX: 919-544-4302.**

POSTDOCTORAL POSITIONS available immediately for molecular studies of *Drosophila* repair and recombination genes. Will be extended to human genes potentially involved in Fanconi anemia and xeroderma pigmentosum. Require background in molecular genetics. Send curriculum vitae and letters of reference to: **James B. Boyd, Department of Genetics, University of California, Davis, CA 95616.** FAX: 916-752-1185. *Equal Opportunity Affirmative Action/Employer.*

RESEARCH SCIENTIST—Cancer research involving synthesis, structural analysis and purification. Requires a Ph.D. in Synthetic Organic Chemistry and strong publication record, as well as one year of experience in job offered or scientific position in similar cancer research, with experience with analytical semi-prep and HPLC, analytical and Prep thin-layer chromatography, gas chromatography, NMR, FTIR, UV-Visible, Fluorescence Spectrophotometer, inert atmosphere techniques, and manipulation of reactive organometallics. Job location and interview is San Diego. Salary is \$46,000 per year. Send this ad and résumé to: **Job # DB22236, P.O. Box 269065, Sacramento, CA 95826-9065** before February 1, 1993.

POSITIONS OPEN

NEUROSCIENCE University of British Columbia (UBC)

The Division of Neurological Sciences (Kinsmen Laboratory) in the Department of Psychiatry at the University of British Columbia invites applications for two tenure-track positions each at the rank of **ASSISTANT PROFESSOR**. Applicants should have a Ph.D. or M.D. degree, postdoctoral training, and have shown clear evidence of a capacity for independent, original research. Outstanding applicants from all areas of neuroscience will be considered. The Division is particularly interested in recruiting individuals with expertise in neurobiology as they apply (1) to hormonal and neurotransmitter regulation of gene expression and (2) to functional consequences of protein phosphorylation in the mammalian brain. The Division offers excellent research facilities. The successful applicants will be expected to be strong candidates for Medical Research Council of Canada Scholarship support. Salary will be commensurate with qualifications and experience. *UBC welcomes all qualified applicants, especially women, aboriginal people, visible minorities, and persons with disabilities. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.* This position is subject to final budgetary approval. Anticipated start date is July 1, 1993.

Applicants should send curriculum vitae, list of publications, a brief summary of research plans, and the names and addresses of three referees to: **Dr. H.C. Fibiger, Professor and Head, Division of Neurological Sciences, Department of Psychiatry, University of British Columbia, 2255 Wesbrook Mall, Vancouver, B.C. CANADA V6T 1Z3.** Applications will be accepted until April 15, 1993.

POSTDOCTORAL POSITIONS

Molecular and Cellular
Cardiovascular Biology Laboratories
Cardiology Division
Vanderbilt University School of Medicine

Postdoctoral positions are available for candidates with Ph.D. or M.D. degrees to begin study June 1993 and thereafter. Trainees will join an existing program in Molecular Cardiology. Opportunities are available in the following laboratories: **Joey Barnett, Ph.D.**—Role of peptide growth factors and their receptors in heart development; **Allen Naftilan, M.D., Ph.D.**—Gene regulation in vascular smooth muscle cells as related to cell growth and lineage development; **Thomas Quertermous, M.D.**—Transcriptional regulation in endothelial cells related to development and differentiation; and **Yie-Teh Yu, Ph.D.**—Role of cell specific transcription factors in skeletal muscle myogenesis. Trainees will occupy new state-of-the-art research facilities, with access to a broad range of core facilities including a transgenic core. Solid training in molecular biology, cell biology, or developmental biology is required. Excellent opportunities for future advancement to tenure-track faculty positions are available. Please send curriculum vitae and names of three references to: **Thomas Quertermous, M.D., Chief, Division of Cardiology, Vanderbilt University School of Medicine, Nashville, TN 37232-2170.** *Vanderbilt University is an Equal Opportunity Employer.*

A limited number of **POSTDOCTORAL FELLOWSHIPS** are available in 1993 in marine sciences, aquaculture, coastal and environmental sciences, biomedical marine research, ocean engineering, and environmental analysis and monitoring. Deadline for application is 15 April 1993. Stipends are \$22,540 for the annual appointment. Specify area of interest with request for information brochure and application packet from: **Personnel Services, Harbor Branch Oceanographic Institution, Inc., 5600 U.S. 1 North, Ft. Pierce, FL 34946.** *Equal Employment Opportunity/Affirmative Action Program.*

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816



CHAIR, DEPARTMENT OF MICROBIOLOGY Duke University School of Medicine

The Duke University School of Medicine invites nominations and applications for the position of Chair of the Department of Microbiology at Duke University. We are seeking an individual with an international reputation in Microbiology. Although the research field is open, individuals with expertise in microbial pathogenesis are especially encouraged to apply. Applicants should have a record of distinguished accomplishment and continuing commitment to the education of predoctoral and postdoctoral students and the development of junior faculty. Substantial financial and space commitments will be dedicated to this position, including faculty positions.

Interested applicants should send a curriculum vitae, description of research interests, and the names of three references to: **Chair, Department of Microbiology Search Committee, Box 3701, Duke University Medical Center, Durham, NC 27710.** Committee will begin to review applications March 15, 1993.

**Duke University
Medical Center**

Duke University is An Equal Opportunity/Affirmative Action Employer.

The Swiss Federal Institute of Technology Zurich Institute of Biotechnology

The ETH Zürich has recently appointed two new Professors in the Institute of Biotechnology who now seek collaborators and graduate students to participate in the research and teaching programs of the Institute. Current and future research projects include enzymatic and whole-cell biocatalysis of hydrocarbon oxidations, synthesis of biopolymers in bacteria and plants, characterizations and applications of such biopolymers, genetic engineering of carbon and energy metabolism in industrial organisms, multiphase fermentations and associated bioseparations, genetics of glycosylation in cultured cells, advanced mathematical methods, and two-dimensional protein gel electrophoresis.

The Institute offers spacious, extremely well-equipped laboratories, sophisticated microchemical, bioreactor and computational facilities, and opportunities for interactions with many other excellent academic and industrial groups in a congenial setting in the hills above Zürich. Positions are available for Ph.D. students (prior Diploma or MS studies or their equivalent preferred), postdoctoral researchers, and junior group leaders. Successful candidates will have extraordinary records of prior accomplishment, aptitude, and attitude with excellent references. Applicants with these qualifications are kindly requested to send a résumé and names, addresses and fax numbers of three references to:

**Prof. Dr. James E. Bailey
Prof. Dr. Bernard Witholt
Institute of Biotechnology
ETH Hönggerberg
CH-8093 Zürich
Switzerland**

ADVANCED DRUGS THROUGH PROTEIN ENGINEERING.

Khepri Pharmaceuticals, Inc. is an exciting, early-stage biotechnology company focused on the development and control of engineered recombinant proteases as human therapeutics. The Company is rapidly assembling a diversified team of outstanding scientists, and has immediate opportunities for degreed professionals who specialize in the following areas:

All positions require a Ph.D. or Ph.D./M.D.

MOLECULAR BIOLOGIST

You must have proven expertise in the cloning, mutagenesis and expression of recombinant proteins. Post-doctoral training in biochemistry, molecular biology or a related field, and experience in cellular biology and protein chemistry are essential.

ENZYMOLOGIST

You must have expertise in the mutagenesis, selection and characterization of enzymes with emphasis on structure/function relationships. Post-doctoral training in biochemistry or chemistry is required. Experience in enzymology and assay development is highly desirable.

CELL BIOLOGIST

As a key member of a multidisciplinary team, you will develop and implement enzyme assays and techniques in biochemistry and cellular physiology for the discovery and characterization of novel protease activities. Post doctoral training must include cell biology or biochemistry. Experience in the design and utilization of robotic systems is desirable.

In addition to a stimulating research environment in the San Francisco Bay Area, Khepri offers competitive salaries, excellent benefits and equity participation. For consideration, please submit your CV to: **Deutsch, Shea & Evans, Inc., Confidential Reply Service Dept. 349, 601 Gateway Blvd., Suite 950, South San Francisco, CA 94080.** EOE.

**Khepri
Pharmaceuticals, Inc.**

Chief

Leader in Food Research for Australia



Package of around A\$125,000

Division of Food Science and Technology, Sydney, Australia

Following a major external review of its food processing research, CSIRO is seeking to appoint an outstanding research leader and manager to lead its Division of Food Science and Technology. This Division is expected to play a leading role in providing a scientific basis for development of the Australian food industry.

The successful candidate will have:

- an outstanding record of research achievement and leadership,
- highly developed research management skills,
- a commitment to consultative planning of research,
- a commitment to the effective application of research results, and
- excellent communication skills.

A good understanding of the issues facing the Australian food industry and of the potential for R&D to enhance its international competitiveness would be a significant advantage. The ability to provide leadership in developing collaborative research programs with other Australian organisations would be highly regarded as would R&D experience in the food industry.

The Division of Food Science and Technology is one of six divisions within the CSIRO Institute of Animal Production and Processing. The Division's headquarters are in Sydney. Its other laboratories are in Brisbane and Melbourne. It has a total staff of about 270.

The Chief will be accountable to the Director of the Institute and responsible for the performance and strategic direction of the Division. The Chief will also represent CSIRO before industry, community leaders, the media and the public. The appointment will be for five years and will involve an annual performance contract between the Chief and the Director of the Institute. Alternatively, other employment arrangements can be negotiated.

The remuneration package for this position will be in the vicinity of A\$125,000 including a salary component of not less than A\$95,706. The package includes superannuation and provision of a private-plated motor vehicle.

More information on the position is available from Mr. John Baistow, Institute Manager (Resources), (Ph: (61 2) 887 8253, fax (61 2) 887 8260). Interested applicants are invited to discuss this position with Dr. Alan Donald, Director of the Institute (Ph: (61 2) 887 8250). The Director would also be interested in hearing from people who may be able to help identify suitable candidates for the position.

Written applications should be sent to: **Dr. A.D Donald, Director, CSIRO Institute of Animal Production and Processing, PO Box 93, NORTH RYDE NSW 2113, Australia** by Friday, 5 March 1993.



CSIRO IS AN
EQUAL OPPORTUNITY EMPLOYER

9982

National Institutes of Health National Institute of Environmental Health Sciences Research Triangle Park, North Carolina

Group Leader - Gene Mapping and Cloning

MISSION - The mission of the National Institute of Environmental Health Sciences (NIEHS) is to characterize the chemical, physical, and biological factors in the environment that can adversely affect human health. The study of the genetic predisposition of an individual in the response to environmental agents is an important component of this mission.

GENE MAPPING AND CLONING - A scientist is sought to lead a group in the study of genes involved in environmental diseases. The incumbent will map genes by a variety of genetic techniques and will isolate these genes by positional cloning and other methods. The incumbent will have the opportunity to collaborate with established NIEHS research programs involving the genetic basis of carcinogenesis, aging, and responses to environmental agents.

Salary, resources, and permanence will be determined by the qualifications of the candidate. The appointment has excellent compensation and benefit packages.

GENERAL REQUIREMENTS - All applicants must possess a Ph.D., M.D., or equivalent degree and two to five years postdoctoral experience. Applicants should have a doctorate degree in one of the following fields: genetics, molecular biology, cell biology, or related areas and show evidence of the ability to carry out independent research. U.S. citizenship is required for permanent positions. For more information contact: Dr. J. Carl Barrett, Chief, Laboratory of Molecular Carcinogenesis, NIEHS (919) 541-2992.

For prompt considerations, send a cover letter indicating area of interest, curriculum vitae, and three letters of reference by March 31, 1993 to:

Norma Daye
NIEHS Personnel Office (HNV59)
P.O. Box 12233
Research Triangle Park, NC 27709



NIH is an Equal Employment Opportunity Employer
NIH is a Smoke-Free Environment

Postdoctoral/Staff Fellow Or Senior Staff Fellow Position.

The Section of Mass Spectrometry, Laboratory of Membrane Biochemistry and Biophysics, National Institute of Alcohol Abuse and Alcoholism, National Institutes of Health, Public Health Service invites qualified individuals to apply for fellowships for the study of **Phospholipid Metabolism and Remodeling** in neuronal tissues. The Section specializes in the study of **polyunsaturated phospholipids** in relation to their membrane function and metabolism. Metabolism of polyunsaturated in neuronal tissues via oxygenative pathways is also actively investigated. A unique opportunity exists for the successful applicant to participate in basic studies involving general elements of lipid biochemistry and clinical studies involving the biological basis of

alcohol action in conjunction with our interdisciplinary group with expertise in modern instrumental techniques including HPLC, GC, UV and mass spectrometry. A background in lipid biochemistry is appropriate for this position. Applicants should be less than 7 years past the granting of a professional degree. The stipend range is from \$25,000 to \$60,000 depending upon experience and qualifications, and a relocation reimbursement and travel allowance may be available. Interested candidates should send a CV, a one-page description of relevant research interests and three letters of reference to Ms. Kathleen Hanratty, Personnel Management Branch, NIAAA, Building 31, Room 1B58, Bethesda, MD 20892.



National Institute On Alcohol Abuse And Alcoholism

9000 Rockville Pike, Bethesda, MD 20892
Equal Opportunity Employer

Amylin

ASSOCIATE DIRECTOR PHARMACOLOGY/PHYSIOLOGY

Amylin Pharmaceuticals, Inc. is a dynamic development stage pharmaceutical company working on new medicines for diabetes and related metabolic disorders.

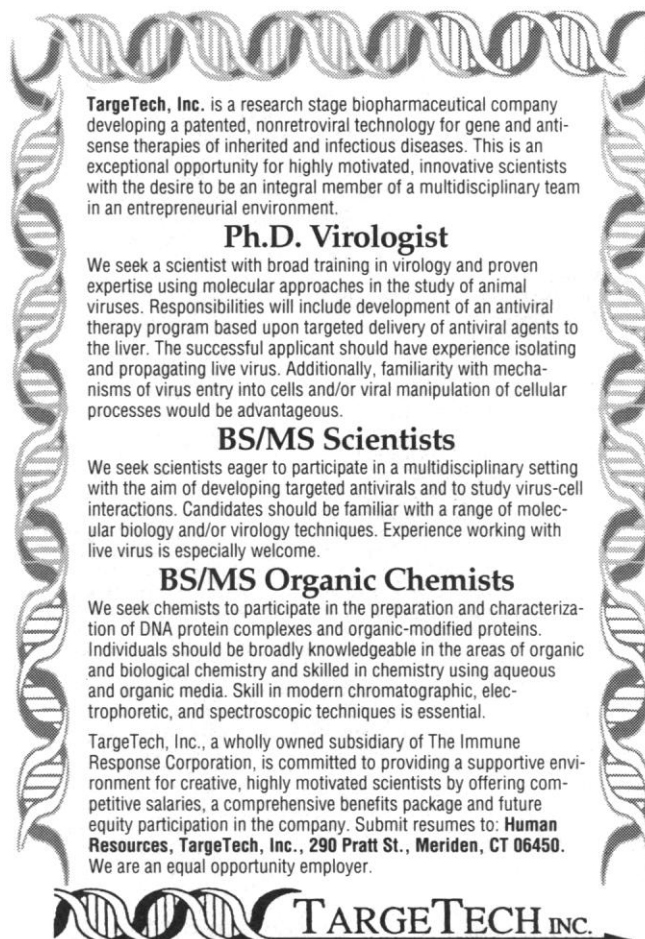
As a senior research scientist and associate to Dr. Andrew Young, Principal Scientist and Senior Director, you will: develop and direct innovative in vivo investigations in endocrinology and metabolism; supervise pharmacodynamic and kinetic analyses of drug candidates; utilize computerized data collection and analysis; contribute to IND's and other documents; and represent the company by verbal presentations and scientific publications.

You should have an M.D., D.V.M. or Ph.D. and a record of independent research demonstrated by original publications. At least 3 years' industrial research and development experience with participation in teams that progressed clinical candidate compounds is highly desirable. Good communication and management skills and an ability to flourish as a team player in a fast-moving environment are essential characteristics.

Amylin is located in San Diego, offering a stimulating work environment and a top-notch scientific community. In addition, we offer an excellent salary and benefits package including stock option participation. We have brought together an impressive team of people to make new medicines based on a major scientific breakthrough. If you would like to be a part of that team, please send your resume and salary history to: A. McGovern/A.Y., Amylin Pharmaceuticals, Inc., 9373 Towne Centre Drive, San Diego, CA 92121.

Amylin is an Equal Opportunity Employer.





TargeTech, Inc. is a research stage biopharmaceutical company developing a patented, nonretroviral technology for gene and antisense therapies of inherited and infectious diseases. This is an exceptional opportunity for highly motivated, innovative scientists with the desire to be an integral member of a multidisciplinary team in an entrepreneurial environment.

Ph.D. Virologist

We seek a scientist with broad training in virology and proven expertise using molecular approaches in the study of animal viruses. Responsibilities will include development of an antiviral therapy program based upon targeted delivery of antiviral agents to the liver. The successful applicant should have experience isolating and propagating live virus. Additionally, familiarity with mechanisms of virus entry into cells and/or viral manipulation of cellular processes would be advantageous.

BS/MS Scientists

We seek scientists eager to participate in a multidisciplinary setting with the aim of developing targeted antivirals and to study virus-cell interactions. Candidates should be familiar with a range of molecular biology and/or virology techniques. Experience working with live virus is especially welcome.

BS/MS Organic Chemists

We seek chemists to participate in the preparation and characterization of DNA protein complexes and organic-modified proteins. Individuals should be broadly knowledgeable in the areas of organic and biological chemistry and skilled in chemistry using aqueous and organic media. Skill in modern chromatographic, electrophoretic, and spectroscopic techniques is essential.

TargeTech, Inc., a wholly owned subsidiary of The Immune Response Corporation, is committed to providing a supportive environment for creative, highly motivated scientists by offering competitive salaries, a comprehensive benefits package and future equity participation in the company. Submit resumes to: **Human Resources, TargeTech, Inc., 290 Pratt St., Meriden, CT 06450.** We are an equal opportunity employer.

TARGETECH INC.

POSITIONS OPEN

POSTDOCTORAL RESEARCH CORNELL UNIVERSITY MEDICAL COLLEGE

Postdoctoral fellows to train in the disciplines of molecular biology, immunology, and virology while conducting research on the biology, pathogenesis and epidemiology of mycobacterial (Mtb, MAC), HIV, and protozoal (Cryptosporidium, Isospora, Leishmania) diseases. In addition to research training at Cornell, postdoctoral fellows may work with outstanding field site preceptors in Haiti or in Brazil. Candidates with an interest in basic and applied research in infectious diseases, including international collaboration, are encouraged to apply. Competitive salary and benefits. Send curriculum vitae and names of three references to: **Warren D. Johnson, Jr., M.D., B.H. Kean Professor of Tropical Medicine, Chief, Division of International Medicine, 1300 York Avenue, A-431, New York, NY 10021.**

POSTDOCTORAL or RESEARCH ASSOCIATE POSITIONS are available for studies of signal transduction by Ras-related and heterotrimeric GTP binding proteins. The first position involves ongoing studies on the regulation of phagocyte NADPH oxidase/other cellular systems by Rac proteins, including regulation of Rac function by associated GAPs, GDI's, etc. and their interactions with other signaling pathways. The candidate should have a knowledge of protein purification and molecular biology (cloning, transfection, mutagenesis, etc.), as well as a genuine interest in the cell biology and biochemistry of signal transduction. The second position involves studies to apply novel approaches to the question of R-G-E coupling in white blood cells. A strong background in molecular biology and knowledge of receptor-G protein signaling pathways is desirable. The candidate should be self-motivated and able to work, to some degree, independently. Salaries commensurate with experience. Contact: **Dr. Gary M. Bokoch, The Scripps Research Institute, La Jolla, CA 92037. Telephone: (619) 554-8217; FAX: (619) 554-6123.**

BIOLOGIST

Entry-level tenure-track position beginning August 1993 for an Animal or Human Physiologist. Duties include teaching advanced courses for undergraduates in specialty area, contribution to the Department's Allied Health offerings including Human Anatomy/Physiology, and advising of majors. Experience in human anatomy/cadaver dissection preferred. Ph.D. required. Résumés will be received until position is filled. Search committee will begin screening candidates on March 1, 1993. Send curriculum vitae and 3 letters of reference to: **Director of Personnel, St. Ambrose University, 518 West Locust Street, Davenport, IA 52803.**

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

Position open: **RESEARCH ASSOCIATE/MOLECULAR ENTOMOLOGIST:** Analyze and monitor physiological interactions between microsporidia and the mosquito host, with emphasis on mosquito immunity functions. Clone dipteran immunity genes from malaria vector, *Anopheles gambiae*. Develop *in vitro* transcription systems for analysis of mosquito genes expressed by RNA polymerase I and II. Analyze expression of cloned genes in transfected cells. Train and teach molecular techniques in laboratory to graduate students. Design and supervise a project in mosquito immunity proteins. Supervise undergraduate students in molecular biology techniques in laboratory. Oversee project: maintain accurate records, observe ongoing experiment. Operate special equipment: including Ultracentrifuge, sequencing gels. Perform electrophoresis. Monitor expression of immunity function in microsporidia infected mosquito. Requirements: two years as postdoctoral fellow in Molecular Biology and Immunology to include: knowledge and experience in DNA sequencing, cloning and related techniques; experience with transfection and cell culture. 3 references. Salary: \$27,500 per year, forty hours weekly, 9:00 a.m. to 5:00 p.m. Send résumés to: **Springmeyer #2-89, MDJT—Room 203, 777 East Lake Street, Minneapolis, MN 55407.**

POSITIONS OPEN

RESEARCH ASSOCIATE in Medicine or Pharmacology needed by a Southwest Ohio university to carry out molecular pharmacological research of calcium channel as well as calcium channel antagonists in cardiovascular system. This will include identification of the binding region for calcium channel antagonists, and the molecular characterization of the functional domains of the calcium channel. Performs common techniques of molecular pharmacology including: (a) isolation of tissue and organ system, (b) DNA cloning, (c) DNA sequencing, (d) Northern and Southern hybridization, (e) polymerase chain reaction (PCR). Analyzes experimental data utilizing computer program. Must have an M.D. or Ph.D. degree in Pharmacology. Must have one year of experience performing molecular pharmacological research in calcium channel of cardiovascular system. Hours 8:30 a.m. to 5:00 p.m., Monday to Friday, 40 hours per week, \$24,800 per year. *Must have proof of legal authority to work in United States.* Send résumé in duplicate (NO CALLS) to: **J. Davies, JO# 1230880, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

The Environmental Defense Fund, a national not-for-profit research and advocacy organization, seeks an **ECOLOGIST or BIOGEOCHEMIST** to fill the position of staff scientist in its New York office. Applicants should have interest and research experience in problems related to global environmental change. Applications will be accepted at the Master's or Ph.D. levels. Carbon cycle modeling, and experimental or modeling studies of terrestrial ecosystems are among the areas of research experience considered relevant. In addition, applicants should have an interest in the policy implications of research. Salary will range up to \$42,500 commensurate with experience. Starting date is April 15, 1993, or later. Deadline for applications is February 15, 1993. *Equal Opportunity Employer. Women and persons of color encouraged to apply.* Résumé and cover letter to:

**GAP Search
Environmental Defense Fund
257 Park Avenue South, 16th floor
New York, NY 10010**

SCIENCE WRITER

Leading Pittsburgh academic medical center has an immediate opening for a qualified science writer with strong skills in project management, writing about clinical and basic research topics, and editing. Bachelor's degree and minimum of 3 years of experience required; background in basic or clinical research or health care setting preferred. Competitive salary and benefits package. Please send résumé and writing samples to: **S.L./Employment Office, University of Pittsburgh Medical Center, DeSoto at O'Hara Streets, Pittsburgh, PA 15213.**

HEALTH RESEARCH ANALYSTS

ECRI, a nonprofit health research agency, seeks persons with life science or clinical epidemiology training and a voracious reading ability to organize clinical literature and critique new health technologies. Excellent analytical and science-writing skills essential. Send curriculum vitae to: **Vivian Coates, Vice President, ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462.**

HYDROLOGIST/ENVIRONMENTAL SCIENTIST, University of the South. The Department of Forestry and Geology invites applications for a three-year entry-level appointment, potentially convertible to tenure-track, available fall 1993. The successful candidate will teach a field-oriented hydrology course, physical geology, and at least two of the following: soils, meteorology, GIS, physical geography, and introductory environmental science. Other courses will be considered. We seek a broadly educated scientist committed to teaching within an undergraduate liberal arts program. Ph.D. or final stages required. Applicants should send curriculum vitae, undergraduate and graduate transcripts, three letters of recommendation, and a statement of teaching interests and experience to: **Donald B. Potter Jr., Department of Forestry and Geology, The University of the South, Seawane, TN 37375 by February 15, 1993. Telephone: (615) 598-1479.**

POSITIONS OPEN



MOLECULAR BIOLOGIST

Ambion, Inc. develops innovative products and kits for molecular biology research. We are seeking **SENIOR SCIENTISTS** for Research and Development. Candidates should have a Ph.D. in molecular biology or related field, a strong publication record and an entrepreneurial spirit. Ambion is in Austin, location of the University of Texas and the state capital, on the edge of the Texas hill country with nearby lakes and rivers that provide abundant recreational opportunities.

Ambion offers competitive salaries, benefits and employee stock option plan. Reply to: **Ambion, Inc., 2130 Woodward Street, #200, Austin, TX 78744.**

AQUATIC TOXICOLOGIST—The Chesapeake Biological Laboratory (CBL) of the University of Maryland System's Center for Environmental and Estuarine Studies (CEES) seeks an aquatic toxicologist to fill a tenure-track position preferably at the **ASSISTANT PROFESSOR** level. Expertise and research interests in mechanisms of action of chemical pollutants on marine organisms is sought. Prospective candidates are expected to have expertise in approaches that apply modern techniques in molecular and cell biology, biochemistry, and physiology to toxicological problems. The successful candidate will be expected to establish an externally funded research program. Research programs at CBL emphasize interdisciplinary environmental research. The successful candidate will relate toxic responses to environmental conditions and contribute to an understanding of sublethal toxic effects on populations of marine organisms. For example, CEES is the lead institution in MEERC (Multiscale Experimental Ecosystems Research Center) that seeks to evaluate ecosystem responses to contaminant input. Participation in the University-wide Graduate Education Program in Toxicology is part of the responsibilities of the successful candidate. Postdoctoral experience is preferred. Please submit curriculum vitae, a statement of research interests, and the names of at least three references to: **Dr. G. Roesijadi, Chair of Toxicologist Search Committee, CBL, Box 38, Solomons, MD 20688.**

Applications received before 1 March 1993 will be given full consideration. *CEES welcomes and encourages applications from minority and women colleagues.*

PLANT STRESS PHYSIOLOGIST

STRESS PHYSIOLOGIST is being sought as principal research scientist at the USDA-Forest Service's Center for Forest Environmental Studies in Macon, Georgia. Individual will design and implement research dealing with plant response to environmental stress, with some emphasis on global climate change and air pollution effects. Applicants should have graduate and postgraduate research experience in ecophysiology, forestry, or related fields. Experience in greenhouse exposure facilities is desirable but not required. The position will require collaboration on multidisciplinary teams as well as extensive communication with other agencies; strong self-motivation and research-leadership are important qualifications.

The Center has funding for salaries, travel, and basic operations: however, Center scientists will be required to seek other funds for specific projects. The position will be GS-14. Salary will be commensurate with qualifications; starting salary ranges from \$54,607 to \$70,987 per annum. **DEADLINE: February 15, 1993.**

If interested in the position, please submit curriculum vitae or SF-171 to: **Dr. Nancy G. Tilghman, Assistant Station Director, Southeastern Forest Experiment Station, P.O. Box 2680, Asheville, NC 28802; Telephone: (704) 257-4302.**

CARDIOVASCULAR PHYSIOLOGIST

Academic Cardiovascular Division seeks a cardiovascular physiologist for research program on triggering of onset of cardiovascular disease. Experience required in animal and clinical research on ventricular fibrillation. Prior work with primary electrical causes of sudden death, strong publication record, and history of grant support desirable. **ASSOCIATE PROFESSOR** level.

Send curriculum vitae to: **Deaconess Hospital, Cardiovascular Division, Institute for Prevention of Cardiovascular Disease, Kennedy Building, One Autumn Street, 5th floor, Boston, MA 02215.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study the development and regulation of liver and intestinal transport mechanisms. The research involves the use of both biochemical and molecular biological techniques. NIH-supported training program requires U.S. citizenship or permanent residency. Contact: Frederick J. Suchy, M.D., Department of Pediatrics, Yale Medical School, 333 Cedar St., New Haven, CT 06510. Telephone: (203/785-4649). Equal Opportunity/Affirmative Action Employer.

NEUROSCIENTIST: The Anatomy Department, School of Veterinary Medicine, Purdue University, invites applications for a tenure-track faculty position (ASSISTANT/ASSOCIATE) in neuroanatomy/neuroscience starting 1 July 1993. Applicants should have a strong commitment to teaching and research. Teaching responsibilities depend upon the applicant's experience but can include any of the anatomical disciplines in human or veterinary medicine. Evidence of successful extramural funding and established productive research expertise given preference. Rank commensurate with experience. Applicants should send curriculum vitae, a letter describing relevant experience and three letters of recommendation by March 1, 1993 to: Edward Hinsman, D.V.M., Ph.D., Search Committee Chair, Department of Anatomy, School of Veterinary Medicine, Purdue University, West Lafayette, IN 47907-1242. Closing date for this position is March 1, 1993 or until filled. Purdue University is an Equal Opportunity/Affirmative Action Employer.

NEUROSCIENCE: THE UNIVERSITY OF PITTSBURGH Department of Pharmacy and Therapeutics invites applications for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level. The ideal candidate should possess the Ph.D. degree with at least two years of postdoctoral experience and have expertise in biochemical and molecular approaches to problems in neuropharmacology; a focus on neurosteroids is desirable, but other areas will be considered. An interest in integrating the approaches with clinical studies is critical. Individuals with other educational backgrounds and experience in this area of research are encouraged to apply. Faculty are expected to develop a strong, extramurally funded research program and to participate in teaching graduate students. Individuals should have a record of scholarly achievement and have superior communication skills. Letters of applications, curriculum vitae, and a statement of research interests and goals should be addressed to: Patricia D. Kroboth, Ph.D., 903 Salk Hall, University of Pittsburgh, Pittsburgh, PA 15261. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.

ARNOLD RESEARCH FELLOWSHIPS

The Arnold Arboretum of Harvard University announces the availability of fellowship appointments and support (Putnam or Mercer Fellowships, Arnold Arboretum Associates, Deland Awards) of variable, renewable duration for specific research projects utilizing the landscape (335 acres), the library (260,000 volumes), herbarium (2,600,000 specimens) and living (5,000 taxa) collections of the Arnold Arboretum. The number of awards each year will depend upon the availability of funds. Applications should include a letter of introduction briefly describing the proposed project and prior contacts with Harvard staff or faculty, and a résumé listing three references. Send by 1 March 1993 to: Dr. Robert E. Cook, Director, Arnold Arboretum, 125 Arborway, Jamaica Plain, MA 02130. For information brochures, call: 617-524-1718.

STAFF ASSOCIATE. Available immediately to join the Immunogenetics Division with interest/experience in HLA and/or lymphocyte differentiation antigens. Requirements are a B.Sc. degree, and 4 years of experience in immunogenetics and cellular immunology. Send curriculum vitae and bibliography to: Dr. Nicole Suciu-Foca, College of Physicians and Surgeons of Columbia University, Department of Pathology, P&S 14-401, 630 West 168th Street, New York, NY 10032.

Columbia University is an Equal Opportunity/Affirmative Action Employer.

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



Wellcome

GREAT PEOPLE DOING GREAT THINGS.

Burroughs Wellcome Co. is known for creativity and innovation. Great things happen when a group of dedicated individuals work toward a goal. And with you on our team, greater things are yet to come. Discover the meaning of greatness at Burroughs Wellcome Co.

Research Scientist III/IV

Position will be filled at the Research Scientist III or Research Scientist IV level. The level of responsibility to be assigned will depend on the individual applicant's background and experience level.

Research Scientist III: Will independently plan, develop and implement research on mammalian cell expression in bioreactors for the production of monoclonal antibodies. Under direct supervision, records all documentation associated with the growth and adaptation of cell lines in a bioreactor. Will write reports and manuscripts as required.

Candidates must have a Ph.D. in cell biology, immunology, biochemistry, genetics, biological sciences, or microbiology PLUS two years of experience in growth of cell lines in a bioreactor; OR an M.S. in cell biology, immunology, biochemistry, genetics, biological sciences, or microbiology PLUS five years of experience in growth of cell lines in a bioreactor; OR a Bachelor's degree as stated above PLUS seven years of experience in growth of cell lines in a bioreactor. Scientific writing assessment required.

Research Scientist IV: Will plan, develop and implement new techniques on mammalian cell expression in bioreactors for the production of monoclonal antibodies; will work closely with Development to transfer cell lines and growth protocols for these cell lines for large scale purification of monoclonal antibodies; and will be fully responsible for recording all protocols associated with the growth and development of these cell lines including manuscript preparation.

Candidates must have a Ph.D. in cell biology, immunology, biochemistry, genetics, biological sciences, or microbiology PLUS four years of experience in growth of cell lines in a bioreactor in an industrial setting; OR an M.S. in cell biology, immunology, biochemistry, genetics, biological sciences, or microbiology PLUS seven years of experience in growth of cell lines in a bioreactor in an industrial setting; OR a Bachelor's degree as stated above PLUS nine years of experience in growth of cell lines in a bioreactor in an industrial setting.

Other factors to be considered for either position include an immunology background especially antibody related and eucaryot molecular genetics background especially antibody related.

In addition to the advantages of our stimulating and challenging atmosphere, Burroughs Wellcome Co. offers one of the best compensation and benefits packages in the industry, including comprehensive health and dental plans, life and disability coverage, tuition reimbursement, relocation benefits, pension and investment savings plan, fitness facilities, and more. To apply, please send your resume, indicating POS. #64444-29, in your cover letter, by February 15, 1993, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-8347.



Wellcome

BURROUGHS WELLCOME CO.

An Equal Opportunity Employer.

PIONEERING A NEW CLASS OF PHARMACEUTICALS

At Gilead Sciences, we have a novel approach to the discovery of human therapeutics through our pioneering work in nucleotide-based technology. We are developing a broad new class of potential pharmaceutical products—disease-fighting drugs that target cancer, cardiovascular disease, and viral infections. For Research Associates and Chemists, our exciting R&D environment and current drug discovery programs represent the opportunity to make a significant contribution.

RESEARCH ASSOCIATES DRUG DELIVERY/METABOLISM

In this position, you'll support research in the area of drug delivery and metabolism of nucleotide based therapeutics to aid in the selection of drug molecules for development. Specific responsibilities will include analysis of biological samples, application of in vitro and in vivo models of transport and degradation, and assisting in the identification of barriers to successful delivery of novel drug molecules. You should have a B.S. and 2 years' relevant experience or an M.S. and 1 year relevant experience in the pharmaceutical/biotechnology industry. Experience in the evaluation of drug delivery systems is desirable.

RESEARCH CHEMISTS

We are currently seeking several exceptional Synthetic Organic Chemists with a BS/MS and 2+ year's of relevant lab experience along with familiarity with synthetic techniques and analytical spectroscopic methods for each of the following areas.

Working in the area of nucleotide chemistry, you'll be involved in the chemical synthesis of nucleotide analogs for the incorporation into oligonucleotides. In our medicinal chemistry group, you'll be responsible for synthesizing a variety of compounds of pharmaceutical interest. Working in our process development group, you'll be involved in scale-up and pilot scale production of candidate compounds.

As an emerging force in the pharmaceutical industry, Gilead provides a comprehensive compensation and benefits package, which reflects our leadership and commitment to our science. If you enjoy a team-oriented environment and would like to make an impact in the development of a new class of human therapeutics, please send your CV to: Human Resources, Gilead Sciences, 346 Lakeside Drive, Foster City, CA 94404. An equal opportunity employer.

GILEAD
SCIENCES

SANDOZ PROFESSORSHIP IN NEUROSCIENCE

THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

Applications and nominations are invited for an endowed, tenure-track position at the Associate or Full Professor level in the College of Medicine Neuroscience Program. The primary criterion for appointment will be research excellence in molecular, cellular, or systems neuroscience with applications to neurological and/or behavioral disorders; holders of the M.D. or Ph.D. are eligible, and primary appointment may be made in either a basic science or clinical department in the college.

The College of Medicine has strengths in a number of areas in neuroscience, and a commitment to enhancing both clinical and basic neuroscience. Center grants provide support in neuro-oncology, psychoneuroimmunology and spinal cord injury. The campus-wide Neuroscience Graduate Studies Program includes 80 faculty members with research interest including *developmental neurobiology, regeneration and plasticity, biochemical neuropathology, neuro-oncology, CNS transplantation, GI neurophysiology, neural control over homeostasis, neuropharmacology, psychobiology, psychoneuroimmunology, brain imaging, neurotrauma, neuromuscular diseases, movement disorders, Alzheimer's disease, and neurobiology of schizophrenia and affective disorders*. In addition, molecular neurobiology is one of the major emphases of the newly created Biotechnology Center on campus.

The Ohio State University is a major research institution with undergraduate colleges, and the graduate and professional colleges (including medical, dental, veterinary, allied medical, and pharmacy) located on the same campus. Physical facilities are excellent, and the Columbus metropolitan area offers diverse cultural and employment opportunities to its 1.4 million inhabitants.

Applications, including a curriculum vitae and the names of 3-5 references should be sent to:

Dr. Michael S. Beattie, Department of Cell Biology, Neurobiology & Anatomy, 4072 Graves Hall, 333 West 10th Ave., The Ohio State University, Columbus, OH 43210 by March 1, 1993. Phone: 614/292-4831 or 614/292-1781.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.

NATIONAL INSTITUTE ON AGING NATIONAL INSTITUTES OF HEALTH Senior Staff Fellow Position Neuropharmacology/Neuropsychology

The Laboratory of Neurosciences, Public Health Service, seeks a qualified neuropsychologist for a Staff Fellow/Senior Staff Fellow position dedicated to clinical pharmacology in relation to aging and therapy of Alzheimer's disease. Responsibilities include writing clinical drug protocols and applying cognitive and physiological measures and functional brain imaging (positron emission tomography) to evaluate mechanisms and effectiveness of drug action in the central nervous system. A Ph.D. in neuropsychology or cognitive neurosciences and research experience in clinical pharmacology are required. The position is located at the NIH campus in Bethesda, Maryland, in the laboratory directed by Dr. Stanley Rapoport. Salary is commensurate with experience. Applicants should send a current curriculum vitae and a letter discussing research interests and experience to:

James V. Haxby, Ph.D.
Laboratory of Neurosciences
National Institute of Aging
National Institutes of Health
Bldg. 10, Room 6C414
9000 Rockville Pike
Bethesda, MD 20892
FAX: 301-402-0595



NIH IS AN EQUAL OPPORTUNITY EMPLOYER

MOLECULAR IMMUNOLOGISTS/ CELL BIOLOGISTS

Gwen Knapp Center for Lupus and
Immunology Research
The University of Chicago

The Gwen Knapp Center for Lupus and Immunology Research of the University of Chicago is seeking applicants at the Assistant, Associate, and Full Professor levels to join the newly formed Center. The Center is committed to developing a strong program in molecular immunology. We are seeking outstanding individuals who are using the approaches of molecular biology and cell physiology to examine basic immune mechanisms and/or disorders such as signal transduction, gene regulation, and antigen processing. Existing immunology programs at the University of Chicago include: lymphocyte development, B and T cell activation, antigen presentation, tumor immunology, transplantation, and autoimmunity. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space will be located within the Institute for Molecular Medicine which is now being formed. This Institute will also house programs in molecular oncology, vascular biology, human genetics, and neurobiology. Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references should be sent to: Dr. Craig B. Thompson, Director, Gwen Knapp Center for Lupus and Immunology Research.



THE UNIVERSITY OF CHICAGO

5841 S. Maryland Avenue, MC1000
Chicago, IL 60637

The University of Chicago is an Affirmative Action Equal Opportunity Employer

PENN
UNIVERSITY of PENNSYLVANIA

**School of Medicine
Chairman**

Department of Cell and Developmental Biology

The University of Pennsylvania School of Medicine seeks outstanding candidates for the position of Professor and Chairman of the Department of Cell and Developmental Biology.

The successful applicant will be of international stature in his/her chosen area of research and will be able to provide academic leadership in the broadly defined areas of cell biology and development. Applicants should have demonstrated qualifications in education and administration.

The University is an equal opportunity affirmative action employer. Women, minority and international candidates are encouraged to apply. Letters of interest, CV, and names of references should be sent to:

Robert L. Barchi, M.D., Ph.D.
Chairman, Cell and
Developmental Biology Search
Committee
University of Pennsylvania
School of Medicine
218 Stemmler Hall
Philadelphia, PA 19104-6074



Postdoctoral Fellow

Biomedical Engineering

Biotechnology Division — Hopkinton, MA

The biotechnology division of Failure Analysis Associates, Inc., an international and scientific and engineering consulting firm, currently seeks a postdoctoral fellow with outstanding academic and professional credentials.

You will be involved in the development of novel devices and instrumentation for use in biotechnology. You will interact with staff engineers and biologists toward the successful application and commercialization of innovative engineering solutions to conventional and unique biological problems. Failure Analysis Associates, Inc. staff represent most engineering and scientific disciplines including fluid mechanics, materials sciences, interactive computer database management, epidemiology, biostatistics, toxicology, and cell and molecular biology. Ongoing projects include the development of bioreactors and growth chambers for the culture of mammalian cells in vitro, the development of sophisticated interactive instrument monitors and alarms, and the growth and expansion of human hematopoietic stem cells for experimental and clinical use, and in vitro manipulation leading to efficient gene transfer.

We require a recent PhD level graduate from an Engineering discipline such as electrical or mechanical design. Candidates with a strong background in biomedical or biochemical engineering are preferred. Proficiency in several programming languages such as C, Windows operating system and Labtech Notebook is required. Experience in the interfacing of instruments and software is essential.

Failure Analysis Associates, Inc. offers a comprehensive compensation and benefits package. For confidential consideration, please send your resume to: Vernetta Wilson, Reg. #167, Human Resources Dept., Failure Analysis Associates, Inc., P.O. Box 3015, Menlo Park, CA 94025, FAX: (415) 328-3049. FaAA believes in a safe work environment and requires a pre-employment physical. EOE.

**Failure
Analysis
Associates**

TM®

POSITIONS OPEN

DEPARTMENT OF BOTANY University of British Columbia

The Department of Botany at the University of British Columbia is seeking applications to fill a tenure-track position in **VASCULAR PLANT SYSTEMATICS**. Preference will be given to persons using multidisciplinary approaches in relating systematics to population biology, biodiversity theory and conservation biology. The successful applicant will be expected to contribute to a new initiative in Biodiversity Research at U.B.C.

Candidates for this position must have a Ph.D. degree and published evidence of research ability. The successful candidate will develop a rigorous research program, be an enthusiastic and competent teacher, and contribute to teaching introductory and upper-level botany/biology courses.

The expected date of appointment is January 1, 1994 (or as negotiated). Application deadline is March 1, 1993. Applicants should send curriculum vitae, selected reprints, a statement of research interests, and have at least three letters of reference sent to: **David H. Turpin, Professor and Head, Department of Botany, University of British Columbia, #3529-6270 University Boulevard, Vancouver, B.C. CANADA V6T 1Z4.**

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. U.B.C. welcomes all qualified applicants, especially women, aboriginal people, visible minorities, and persons with disabilities. The position is subject to final budgetary approval.

MARINE INVERTEBRATE BIOLOGIST

The Biology Department, University of Massachusetts Dartmouth (UMD), seeks applications for a tenure-track position in Marine Invertebrate Biology. Candidates whose research uses a molecular approach to marine ecology or evolutionary biology will be given special consideration. The position requires a Ph.D. and is for fall 1993. The successful candidate will be expected to teach courses at the undergraduate and graduate levels of instruction and develop an active research program. The Biology Department at UMD offers an M.S. in Biology and Marine Biology, and is expected to offer the Ph.D. in Marine Sciences in the near future. Applicants should send curriculum vitae, and include the names, addresses and telephone numbers of 3 referees to: **Dr. LeBaron C. Colt, Chair, Biology Department, University of Massachusetts Dartmouth, North Dartmouth, MA 02747; (Telephone: 508-999-8230 or 8208; FAX: 508-999-8901).** Applications will be accepted until March 30, 1993. *The University of Massachusetts Dartmouth is an Affirmative Action Institution and Equal Opportunity Employer. Women and minorities are strongly encouraged to submit applications.*

ECOLOGIST/GIS SPECIALIST

World Wildlife Fund (WWF-US), seeks ecologist for its Conservation Science Program to manage and coordinate the use of GIS, especially the use of relational databases for conservation planning and analyses. Position requires advanced degree in a natural resources field, three years of experience with relational databases, and excellent ability to interface between users and GIS; proficiency with UNIX preferred; tropical experience desirable. This is a one-year contract position; extension expected. Send cover letter, résumé, and names of three references by February 1, 1993 to: **WWF, Human Resources Department 277-F, 1250 24th Street, N.W., Washington, D.C. 20037.**

Affirmative Action/Equal Opportunity Employer.

Immediate openings for full-time Board Certified or Board Eligible **PSYCHIATRISTS**. Full service medical center, inpatient and outpatient, special programs in PTSD, Neuropsychiatry, Geropsychiatry, Alcohol Addictions, Brain Imaging and Cultural Psychiatry. Treatment outcome, brain imaging and psychopharmacologic studies underway. Medical school affiliation with faculty appointment with the University of Minnesota. One position for senior researcher in schizophrenia. Opportunities are also available for VA research. Interested applicants may contact:

Joseph Westermeyer, M.D., Ph.D.
Veterans Affairs Medical Center
One Veterans Drive
Minneapolis, MN 55417
Equal Opportunity Employer.

ANNOUNCEMENTS

RESEARCH FUNDING AVAILABLE. Medical Venture Capital Firm seeks to license patented or patent pending technology leading to medical therapeutics. Research at all stages of development needed. Generous compensation for both your research and successful referrals. Unique opportunity to see your research rapidly and efficiently developed. Call or write: **Scott Wolf, M.D., Medical Venture Partners, 375 Park Avenue, Suite 1501, New York, NY 10152, Telephone: (212) 832-4379.**

Utah Genome Technology Workshop HUMAN GENE MAPPING & SEQUENCING June 13-26, 1993

- Intensive, hands-on laboratory & computer
- Faculty lectures plus one-on-one direction
- Guest lecturers present current research
- Skills for applying techniques in your own lab

For Graduate Students, Ph.D. or M.D., who need state-of-art research skills and knowledge. 16 students only.

Genome Technology Workshop
Eccles Institute of Human Genetics
University of Utah, Building 533, Room 6160
Salt Lake City, UT 84112
Telephone: 801-585-5606, FAX: 801-581-7796

COURSES AND TRAINING

PREDOCTORAL TRAINING IN NEUROSCIENCE INTERDISCIPLINARY Ph.D. PROGRAM IN NEUROSCIENCE Louisiana State University Medical Center School of Medicine New Orleans

Applications are being accepted for the newly created interdisciplinary Ph.D. Training Program in Neuroscience. Intensive training in neuroscience provided by this program reflects the breadth of research programs of the faculty, which spans both behavioral neuroscience and molecular neurobiology, ranging from genes, to cells, to human behavior. Generous stipend support is available on a competitive basis. Highly qualified individuals should send inquiries to: **Nicolas G. Bazan, M.D., Ph.D. or R. Ranney Mize, Ph.D., Co-Directors of the Interdisciplinary Ph.D. Program, c/o LSU Neuroscience Center of Excellence, 2020 Gravier Street, Suite B, New Orleans, LA 70112; FAX: (504) 568-5801. Equal Opportunity/Affirmative Action Employer.**

MEETINGS

The 1993 **Conference on Implantable Auditory Prostheses** will be held July 11-15, 1993 in Smithfield, Rhode Island, USA. The program will comprise invited presentations by leading cochlear implant researchers, and informal presentation of contributed papers and posters. For further information contact: **Irma Nieves, House Ear Institute, 2100 West Third Street, Los Angeles, CA 90067, USA (FAX: 213-413-0950).**

More than 150,000 people
paid to see your ad in **SCIENCE**.
Classified Advertising Department
Telephone: 202-326-6555
FAX: 202-682-0816

COMPUTER MARKETPLACE

STATISTICAL SOFTWARE

Accurate, easy to learn. For MS-DOS. Includes t-tests, ANOVA, chi-square tests, DOE, survival analysis, sample size and power analysis, curve fitting, graphics, more. Spreadsheet-style interface. Transfer graphics to other programs. Thousands of users. Base system: \$125. Complete: \$395. Ask for Dr. Hintze (PhD statistician) at (801) 546-0445. FAX: (801) 546-3907. NCSS, 329 North 1000 East, Kaysville, UT. 84037.

Circle No. 5 on Readers' Service Card

COMPUTER MARKETPLACE

CLINICAL STATISTICAL SOFTWARE

CLINSTAT: Comprehensive, user-friendly, statistical software for clinical research. (IBM PC compatible). No computer savvy or learning period needed. Bioassay, clinical trials, multi-center studies, survival analysis, t-tests, etc. In world-wide use by drug companies, university med centers and consultants. \$435. J. B. Chassan, PhD, 763 Bloomfield Av., Montclair, NJ 07042. (201) 746-9555. FAX: (201) 509-9727.

Circle No. 27 on Readers' Service Card

MARKETPLACE

DNA SEQUENCING

- Unambiguous Sequence Determination
- PCR Product Sequencing
- Single Primer Reads — \$190
- Fast, Accurate, Affordable
- Complete Molecular Biology Services

Ambion 1-800-888-8804
1-512-445-7139 FAX

Circle No. 15 on Readers' Service Card

GROWTH MEDIA IN CAPSULES

FOR BACTERIA & YEAST
More than 100 Molecular Biology
Formulations in Stock.

Request comprehensive price list.
Custom formulations in 48 hours!

800-424-6101
FAX 619-598-0116

✓ 8/10 101

Circle No. 24 on Readers' Service Card

FLUORESCENT MICROSPHERES

Distinctive colors for biology, diagnostics, physiology, aerosols, and filter testing. Diameters from 0.025 to 165 µm in red, green, blue fluorescence. Assorted surface properties for protein coupling. Free catalog available. Toll Free 800-334-3883. In Calif. 415-962-1100. FAX 415-962-0718

Duke Scientific Corporation 1135D SAN ANTONIO ROAD
PALO ALTO, CALIF. 94303

Circle No. 1 on Readers' Service Card

486 Based

3-D Neuron Tracing & Analysis

Eutectic Electronics, Inc. USA

800-942-4480 Fax: 919-782-9113

Circle No. 2 on Readers' Service Card

U.S. RESIDENCE—RESEARCHERS AND PROFESSORS

New INS laws make it easier for you to obtain
U.S. residency (EB-2, EB-1, etc.).
FAX, write or call for free brochure.

LAW OFFICES OF S. BERNARD SCHWARZ
381 PARK AVENUE SOUTH, SUITE 617
NEW YORK, N.Y. 10016
TEL 212/447-0950 FAX 212/447-0804

Former INS Attorney, Professor of Law, nearly 20 years experience

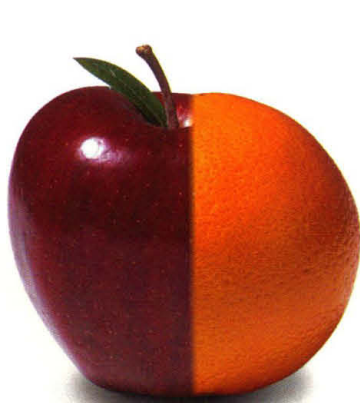
Custom DNA Purified and Delivered in 48 hours.

\$7.50 per base • Purified
Guaranteed minimum 100 µg DNA

Research Genetics
1-800-533-4363

Circle No. 8 on Readers' Service Card

At \$2.80 *per base*,
OPERON'S DNA makes
anything POSSIBLE.



THE APPLORANGE



THE ZUCCHANA



\$2.80 PER BASE DNA FROM OPERON

ANNOUNCING PRICE REDUCTIONS FROM
THE WORLD'S LEADING SUPPLIER OF DNA.

Operon's price reductions present a whole new world of possibilities. Our custom DNA is now available for just \$2.80 per base with a \$20 set-up fee per sequence. So you can afford to do more experiments and get more results.

Operon consistently delivers precisely the product you need. On time. With unsurpassed purity. Backed by an unconditional guarantee. And, as you can see, at an extremely

competitive price. We ship our custom-made sequences in two working days, on average. And that includes large orders and orders placed late in the day.

So don't let your budget limit your thinking. Call Operon, the company that makes anything possible. In terms of speed, purity, and savings, there are no bases for comparison.

CALL 1-800-688-2248 EXT. 120 TODAY.

OPERON

WORLD'S LEADING SUPPLIER OF SYNTHETIC DNA



©1993 OPERON TECHNOLOGIES, INC., 1000 ATLANTIC AVENUE, SUITE 108, ALAMEDA, CA 94501. PHONE: 510-865-8644. FAX: 510-865-5255. NIHBP 263-00033233

Circle No. 9 on Readers' Service Card

Peptide Antibody Production

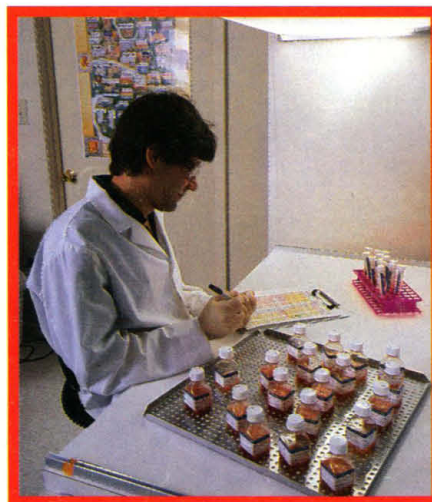
\$1195*

Utilizing synthetic peptides up to 10 residues

Receive ~100 ml of antiserum in 16 weeks

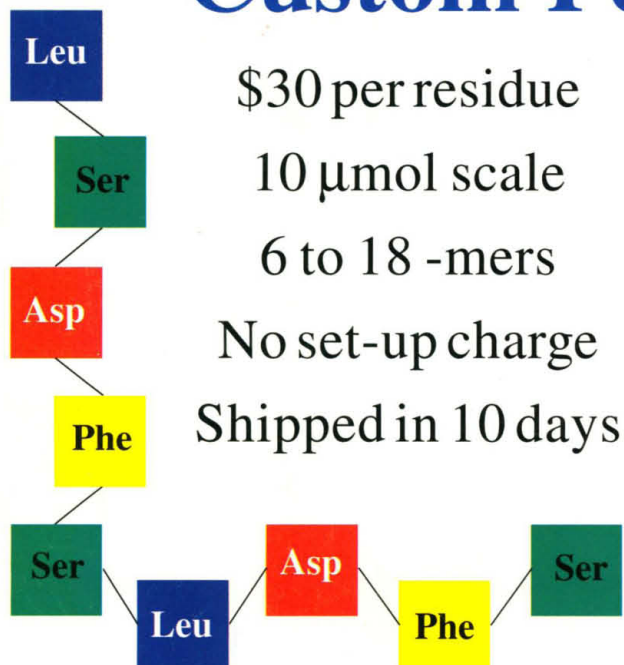
*Add \$30 for each residue over 10

Research Genetics is proud to provide an economical "start-to-finish" custom peptide/polyclonal antibody



production service. Just supply us with the peptide sequence and we do the rest! Your peptide will be synthesized using the latest Fmoc solid phase methods utilizing MAP resin technology which increases the antigenic response. When requested, first bleed serum is available upon collection for the cost of shipment.

Custom Peptide Synthesis



\$30 per residue

10 μ mol scale

6 to 18 -mers

No set-up charge

Shipped in 10 days

- Includes synthesis, cleavage, precipitation, solubilization, and lyophilization
- Crude yields average 8 to 12 mg for 10-mers or longer
- HPLC analysis - \$75
- C-terminal amidation - \$30
- N-terminal acetylation - \$30
- HPLC reverse phase purification (>80% purity) - \$220

We guarantee your total satisfaction and we do not charge for sequences that we are unable to adequately synthesize. Please feel free to contact us for special peptides or any technical assistance that you require.

Research Genetics

2130 Memorial Pkwy SW, Huntsville, AL 35801
USA or Canada 1-800-533-4363
UK 0-800-89-1393
FAX 1-205-536-9016

Custom DNA

Purified and Delivered in 48 hours

Research Genetics

1-800-533-4363

Circle No. 34 on Readers' Service Card