

PRODUCTS & MATERIALS

Genetic Workstation

For research in karyotyping, chromosomal evaluation, fluorescence in situ hybridization, and comparative genomic hybridization, the QUIPS Genetic Workstation is designed to capture, enhance, analyze, and print high-quality images. The unit allows researchers to visualize fluorescent signals under a high-powered fluorescence microscope. With a simple point and click, the user can capture and resolve even closely spaced probe signals. The system combines a high-performance, digital charge-coupled device camera with powerful imaging software to permit acquisition and analysis of even the weakest signals. Resolution of the camera approaches the theoretical maximum for light. A complete line of reagents is available to complement the system. Vysis. Circle 139.

Shaking Water Bath

The SWB 5050 Shaking Water Bath for biological applications has a wide temperature range to meet needs from growing bacterial



cultures to hybridization to denaturation of DNA samples. It is a large capacity bath, holding 50 liters of water. A microprocessor controls all functions including shaking

speed, temperature, and timed operation. The bath can be set at any temperature from ambient +5° to 95°C. Shaking speed can be adjusted from 20 to 200 strokes per minute. Stroke length is also adjustable. National Labnet. Circle 140.

DNA Sequence Analysis Software

Vector Director is a powerful new DNA sequence analysis application for the Macintosh. It determines all feasible cloning strategies and ranks them based on quality. Vector Director automates the task of determining how to excise a gene and insert it into the vector of choice. Instead of spending hours pouring over restriction maps, the user simply provides relevant sequence files and indicates the objective. In a matter of seconds, Vector Director exhaustively searches for suitable cloning strategies. GeneCraft. Circle 141.

Microspheres for Specific Binding

A new class of microspheres has "easy binding" surface chemistries. The surface epoxy groups of these pre-activated microspheres permit easy covalent coupling of antigens, antibodies, haptens, or oligonucleotides. Any ligand with primary amino or other similarly reactive groups can be bound to these microspheres quickly. Then the remaining epoxy groups can be reacted or quenched to prevent nonspecific binding. Sizes range from 30 nm to 6 µm. They are available as methylmethacrylate/epoxy or styrene/epoxy. Bangs Laboratories. Circle 142.

In Vivo Nitric Oxide Determination

A new assay for determination of total in vivo nitric oxide (NO) production detects both final products of NO synthesis—nitrite and nitrate. The assay is an improvement

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.

The RNA analysis source

Ambion offers a complete range of kits and reagents for RNA analysis including:

Ribonuclease Protection Assay—Ten Times More Sensitive Than A Northern

For single tube, high sensitivity RPAs use the RPA II™ Kit. And for precious samples the Direct Protect™ Lysate RPA Kit allows probing directly in cell lysates without prior RNA isolation.

S1 Nuclease Protection

The S1 nuclease protection assay is now in convenient kit form. The S1™-Kit provides function tested solutions and controls necessary for analysis and mapping of RNA with DNA probes.

Ambion is the first company to offer RPA and S1 nuclease protection assay kits.

Novel technology has been incorporated into each kit to bring you state of the art speed, efficiency, and ease of use.

Contact us today for information on our full range of products for RNA analysis.

(512) 445-6979 (512) 445-7139 FAX

(800) 888-8804

Ambion

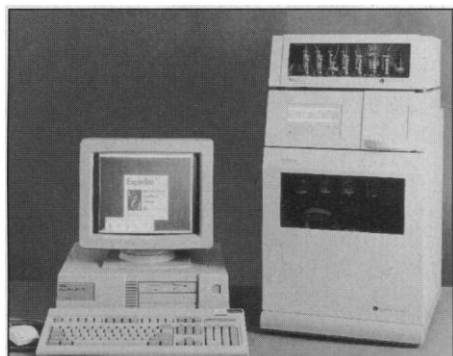
Innovative Products for RNA Analysis

Circle No. 24 on Readers' Service Card

over the use of Griess reagents, which detect only nitrite. The test is easy to perform and is sensitive to 1.5 to 2 μ M. NO is produced by many cell types and plays a key role against pathogens through oxidative toxicity. **R&D Systems Europe. Circle 143.**

Multiple Oligo Synthesis System

The Multiple Oligo Synthesis System (M.O.S.S.) Option, an extension of the Ex-



pedite Nucleic Acid Synthesis System, can increase efficiency in laboratories pursuing high throughput DNA synthesis. The M.O.S.S. Option, which supports 50 nM, 0.2 μ M, and 1.0 μ M DNA and thioated DNA

synthesis protocols, enables unattended synthesis of up to 16 oligonucleotides in less than 10 hours. The system has 16 independent column positions and runs two columns simultaneously in cycles less than 4 min to allow users to stop, start, or abort syntheses using a variety of protocols while the system is operating. **PerSeptive Biosystems. Circle 144.**

Strong Acrylamide

Duracryl is an acrylamide formulated to provide high mechanical strength, making it useful for thin (<1 mm thickness), large format, and low percentage acrylamide gels. In addition, Duracryl provides the high purity needed for applications requiring excellent reproducibility and enhanced gel staining properties. The thin gel formats that can be routinely run using Duracryl provide efficient gel cooling to give faster run times and improved resolution. **Oxford GlycoSystems. Circle 145.**

In Vitro Transcription Kits

The ConScript in vitro transcription kits enable researchers to obtain high specific activity RNA probes and unlabeled RNA mol-

ecules. The reaction is a standard 1-hour procedure that synthesizes 10 to 15 μ g of unlabeled RNA per reaction. Separate kits are available for T3, T7, and SP6. **Biotech Laboratories. Circle 146.**


Literature

1995/96 *Harlan Bioproducts for Science Catalog* offers products including monoclonal and polyclonal antibodies, cytokines and growth factors, fetal bovine and other sera, chromogens, and tissues. Services include monoclonal antibody production, hybridoma development, murine antibody production testing, custom conjugation, genetic monitoring, and antibody purification. **Harlan Bioproducts for Science. Circle 147.**

Albumins describes a line of biochemicals. **Sigma Chemical. Circle 148.**

Robo Vial is a brochure on a line of robotic compatible glassware designed for robotic arm and other autosamplers. **Kimble Kontes. Circle 149.**

Star-Ion from the Galaxy Series describes an ion chromatography column for suppressed mode anion analysis. **Phenomenex. Circle 150.**

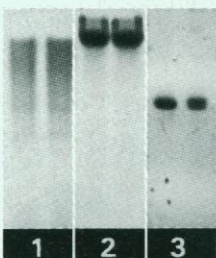


MOLECULAR RESEARCH CENTER, INC. presents

SMART SOLUTIONS


The most reliable and cost-effective reagents for DNA and RNA isolations. Using separation technology based on the recognition of target molecules by a liquid phase, these innovative reagents outperform traditional DNA and RNA isolation methods. No enzymatic treatments! No columns! No prolonged protocols!

DNAzol™, a new standard of simplicity and effectiveness in the isolation of high quality genomic DNA, developed by P. Chomczynski.



- Requires only 10 - 30 minutes
- Effective with cells, tissue and liquid samples, including blood.
- No phenol or other toxic agents
- Isolated DNA ② is ready for Southern blotting, restriction analysis ①, PCR ③, molecular cloning and other applications.

TRI REAGENT®, the most advanced version of the single-step method of RNA isolation.



- Isolates high quality total RNA in less than one hour
- Can be used to simultaneously isolate RNA, DNA and proteins
- Effective with cells, tissue and liquid samples, including blood.
- Isolated RNA ⑤ is ready for Northern blotting ④, RT-PCR ⑥, and other applications

For information or to place an order from USA, Canada and countries not listed below call 1-800 462-9868, 513-841-0900 or Fax 513-841-0080.

MRC
MOLECULAR RESEARCH CENTER, INC
5645 Montgomery Rd. Cincinnati, OH 45212

AUSTRALIA: A.G.P. Technologies Pty Ltd 61-7-3419702 Fax 61-7-841-3422; **FRANCE:** Euromedex 33-88-180722 Fax 33-88-180725; **GERMANY:** BioTech Trade & Service GmbH 49-6227-51308 Fax 49-6227-53694; **INDIA:** Lab Care Products 91-11-6425156 Fax 91-11-6425156; **ISRAEL:** Tal Ron 972-8-472563 Fax 972-8-471156; **ITALY:** Bio-Optica Milano SpA 39-2-2640274 Fax 39-2-2153000; **KOREA:** Choong Il Chemical, Inc 822-2946411 Fax 822-2936556; **MALAYSIA:** Technicvest Sdn. Bhd 603-6320998 Fax 603-632-0994; **SWITZERLAND:** Lucerna Chem Ag 41-41-369636 Fax 41-41-369656; **TAIWAN:** Pan Asia Biomedical Technology, Inc. 886-2-7418169 Fax 886-2-7764372; **UNITED KINGDOM:** Molecular Research Centre Oxford 44-1993-706736 Fax 44-1865-351511.

Biomedicine '96

May 3-6, 1996
Washington, D.C.

Medical Research from Bench to Bedside

Association of American Physicians
(AAP)

American Society for Clinical
Investigation (ASCI)

American Federation for Clinical
Research (AFCR)

and presented in conjunction
with

SCIENCE

Join us in Washington, D.C. for a
showcase of the latest in biomedical
research with clinical applications.

The program will explore current
topics in clinical and basic research
presented as **Theme Symposia**,
State-of-the-Art Lectures, and
Abstract Presentations in oral
and poster formats.

**Bonus
Program**

**Satellite Symposia/
Meetings**

Conference registration fee
includes:

Molecular Medicine Society

May 3, 1996 – The 1st Annual MMS meeting
with AAP/ASCI/AFCR in conjunction with
SCIENCE. MMS leads off on May 3, features full
plenary sessions, unites basic scientists and
clinical investigators. Use Biomedicine '96
abstract forms – cite MMS.

Association of Subspecialty Professors

May 4-5, 1996

GCRC Program Award for Excellence

May 4, 1996

Also featured:

Basic Aspects of Immunology

Sponsored by the Walter Reed Army Institute of
Research – May 1-3, 1996

Acute Renal Failure in the 21st Century

May 6-8, 1996

**Send Me Biomedicine '96
Information Today!**

I'm interested in: ☐ Conference ☐ Exhibiting

Name _____

Title _____

Organization _____

Address _____

City _____

State _____

Zip _____

Phone _____

Fax _____

Mail or fax to: Biomedicine '96, 6900 Grove Road,
Thorofare, NJ 08086-9447. Phone: 609-848-1000. Fax:
609-848-5274. E-mail: biomedicine96@slackinc.com

Circle No. 47 on Readers' Service Card

PFANSTIEHL

Look to us for building blocks for
pharmaceutical chemistry.

This capability starts with our basic product line of blocked
sugars, nucleosides, and a broad range of carbohydrates for
the life sciences and key intermediates for anti-viral R&D. We
are also leaders in the production of ultra high purity, low
endotoxin sugars for critical applications, such as tissue
culture work and fermentation. In the life sciences, we've got
the blocks to build on. Request information.

PFANSTIEHL LABORATORIES, INC.

The source for carbohydrate chemistry

1219 Glen Rock Avenue / Waukegan, IL 60085-0439
1-708/623-0370 • Toll Free: 1-800/383-0126 • FAX: 708/623-9173
International: Pfanstiehl (Europe) Ltd.
+44 (0) 1606.331825 • FAX: +44 (0) 1606.331826



P5

MAKING THINGS WORK

Circle No. 42 on Readers' Service Card

AT LAST! An affordable ICCD camera. \$5995.

PTI is the world's leading manufacturer of state-of-
the-art, low-light fluorescence imaging systems.
Our customers have been asking us to find an
affordable ICCD camera that will do the job.

Good cameras—even less-desirable SITs—can run
in the tens of thousands, and the prices keep going up.

We couldn't find a camera to suit our customers' needs—so we built one!

Introducing the **IC-100** intensified CCD camera for microscopy imaging. At only \$5,995*,
it does the job of cameras costing many times as much. We're so confident you'll be satisfied
with its performance, we'll let you try it for 14 days**. If you like it, keep it. If not, send it back.

Now you can afford an ICCD camera for a new imaging system or as a replacement for your SIT.
But don't wait long—they'll be going fast! Contact your nearest PTI sales representative today!



IC-100 shown with optional lens.

PTI Photon Technology International

United States: 1 Deerpark Drive, Suite F, South Brunswick, NJ 08852
Phone: (908) 329-0910 Fax: (908) 329-9069

Canada: 347 Consortium Ct., London, Ontario, Canada N6E 2S8
Phone: (519) 668-6920 Fax: (519) 668-8437

UK: Suite 3, the Sanctuary, Oakhill Grove, Surbiton, England KT6 6DU
Phone: +44 (0)181-390-6676 Fax: +44 (0)181-390-6610

Germany: Hafenstraße 32-32a, D-22880 Wedel, Germany
Phone: +49 4103-82063 Fax: +49 4103-14482

*Price valid in North America. May be higher elsewhere.

**14-day return offer valid only in the United States and Canada.

Circle No. 45 on Readers' Service Card

SCIENCE

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

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

How to Submit a Classified Ad:

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

Mail, FAX or Email materials to:

Science Classified Advertising
1333 H Street, N.W., Room 814
Washington, DC 20005
Telephone: 202-326-6555 or 202-326-6534
FAX: 202-682-0816

Internet Email: science_classifieds@aaas.org
(please include telephone number in email correspondences)

Rates: Ads are \$43 per line; \$430 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. Line advertisements are not commissionable.

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

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 Debbie Cummings at telephone: +44(0) 1223 302067 or fax: +44(0) 1223 576208.

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

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

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. for fractional display ads call:

Bethany Ritchey
Recruitment Display Advertising
Telephone: 202-326-6541
FAX: 202-682-0816

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

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

Science Global Career Network: Unless otherwise instructed, every classified advertisement submitted for publication in *Science* is automatically posted on *Science's* on-line classified advertising service, Science Global Career Network, at no additional charge. Science Global Career Network address:

WWW: <http://www.aaas.org>
Gopher: gopher.aaas.org

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

POSITIONS OPEN

DIRECTOR PROGRAM IN HUMAN AND MEDICAL GENETICS

The University of Colorado Health Sciences Center, in Denver, seeks candidates for the position of **DIRECTOR** of a newly formed program in Human and Medical Genetics. Entities involved in this program include the Schools of Medicine, Dentistry, Nursing and Pharmacy, the Eleanor Roosevelt Institute for Cancer Research, and The Children's Hospital. The Program Director is expected to integrate already substantial efforts in clinical genetics and genetics research and education on the campus, to develop new research initiatives, and to develop and direct a doctoral program in human and/or medical genetics. The successful candidate should be a senior M.D., M.D./Ph.D., or Ph.D. investigator with a national or international reputation in basic and/or clinical genetic research. Administrative experience, and the ability to lead and interact effectively with clinical, training, and genetic counseling programs and with the community, are essential attributes. The University of Colorado Health Sciences Center is prepared to commit substantial resources to this position, including competitive personal compensation and start-up funds for the Director, faculty positions, research space, and funds for program initiatives. Review of applicants will begin on January 15, 1996, and continue until a successful candidate is identified. Letters of interest, together with curriculum vitae, should be sent to:

Stephen I. Goodman, M.D., Head
Genetics Search Committee, Box B-161
University of Colorado Health Sciences Center
4200 East Ninth Avenue
Denver, CO 80262

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

TWO BIOLOGY POSITIONS

The Department of Biological Sciences at Eastern Kentucky University seeks applications for tenure-track **ASSISTANT PROFESSOR** positions in (1) ichthyology and (2) microbiology, beginning August 15, 1996. Ichthyologist will teach general biology, ichthyology, and fish ecology, with possible additional involvement in comparative vertebrate anatomy and biogeography, and will curate a museum fish collection. Microbiologist will teach clinical microbiology courses for nursing and allied health students, medical mycology for microbiology majors, and an additional course in the area of specialization. Essential qualifications: Ph.D. (microbiology applicants should have a Ph.D. in microbiology), evidence of excellent teaching and communication skills, evidence of active research, and a convincing desire to engage in teaching and research activities that include undergraduate and graduate students. Send application letter, curriculum vitae, transcripts, statements of teaching philosophy and research interests, and three letters of reference to the attention of the Chair of the appropriate search committee. Address applications to: **Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475-3124**. Closing date for applications is Friday, February 16, 1996. *Eastern Kentucky University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are especially encouraged to apply. Employment Eligibility Verification Required. Immigration and Control Act of 1986.*

PROFESSOR OR ASSOCIATE PROFESSOR OF BIOLOGY

Tenure-track, nine-month **FACULTY POSITION** starting in August 1996. A Ph.D. or equivalent degree in biology or a related field and five years of professional experience is required. Experience in biotechnology desired. The successful candidate is expected to build a research program emphasizing collaboration with chemists and chemical engineers. Teaching duties may include human A&P, general biology, and ecology. A record of funded research, successful teaching, and professional innovation is expected. To apply, send application with résumé and names of three references to: **Dr. James M. Munro, Chair, Department of Chemistry and Chemical Engineering, South Dakota School of Mines and Technology, 501 East Saint Joseph Street, Rapid City, SD 57701**. Applications received by January 29, 1996 will receive full consideration. *South Dakota School of Mines and Technology is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Yale University Comprehensive Cancer Center under **Dr. Vincent DeVita, Jr.**, and the Medical Oncology Section of the Yale University School of Medicine under the new leadership of **Dr. Albert Deisseroth**, have developed faculty positions at the **ASSISTANT** and **ASSOCIATE PROFESSOR** levels for clinician scientists and clinical investigators interested in establishing new directions in therapy for any and all organ sites in medical oncology. A network of 14 referring hospitals in Connecticut from which to accrue patients, Yale's heritage of excellence in radiation therapy, surgical oncology, and molecular pharmacology, combined with world class strengths in signal transduction, structural biology, genetics, and immunology, provide an environment in which the boldest and most exciting initiatives in therapy can be aggressively pursued. Please send curriculum vitae and three letters of reference to: **Mrs. Jacqueline McKim, Department of Internal Medicine, Yale University School of Medicine, 135 College Street, 2nd Floor, New Haven, CT 06510-2483**, by March 1, 1996. *Yale is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.*

CARDIOVASCULAR PHYSIOLOGISTS OR BIOMEDICAL ENGINEERS

The University of Louisville, Department of Surgery, has full-time faculty research positions for **ASSISTANT/ASSOCIATE PROFESSOR** with the Division of Thoracic and Cardiovascular Surgery. Candidates must have an M.D., Ph.D., or D.V.S. degree, demonstrated potential for independent research, and demonstrated success in acquiring peer-reviewed grants. Preference will be given to candidates with large animal experience and NIH funding. Ongoing research interests are cardiomyoplasty, hypoplastic left heart syndrome, left ventricular pediatric assist devices, pharmacologic modification of arterial graft hemodynamics, and minimally invasive approaches to coronary artery bypass surgery. Send application, résumé, past (research) and future plans, and names of three or more references to: **Hiram C. Polk, Jr., M.D., Chairman, Department of Surgery and William P. Santamore, Ph.D., Director of TCV Research, Department of Surgery, University of Louisville, Louisville, KY 40292**. Cut-off date is January 31, 1996. (Previous candidates sending applications need not reapply.) *An Affirmative Action/Equal Opportunity Employer.*

VERTEBRATE BIOLOGIST

The Department of Biological Sciences, University of Southern Mississippi, invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. We seek a vertebrate biologist whose research focuses on amphibians, reptiles, or mammals. Preference will be given to candidates who are ecologically oriented; specific interests and approaches to research are open. The successful candidate will be expected to develop an externally funded research program and to direct M.S. and Ph.D. students. Teaching responsibilities include participation in the introductory biology program, vertebrate biology and course(s) in the incumbent's area of interest (for example, herpetology or mammalogy). A Ph.D. degree is required. Submit curriculum vitae, representative reprints, concise statements of research and teaching interests, and the names, addresses, and telephone numbers of at least three references by February 2, 1996, to: **Frank R. Moore, Vertebrate Biologist Search Committee, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406-5018**. *ADA/Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL BIOLOGIST

Tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position anticipated fall 1996. Ph.D. required. Postdoctoral experience and background in experimental animal embryology and histology using modern approaches preferred. Candidate will teach undergraduate/graduate courses, participate in The City University of New York Ph.D. Program, and maintain a vigorously funded research program. Salary ranges: Assistant Professor \$29,931-\$52,213, Associate Professor \$39,003-\$62,394. Appointment rank and salary will be commensurate with qualifications and experience. Send curriculum vitae and names of three references by March 1, 1996 to: **Dr. Thomas E. Jensen, Department of Biological Sciences, Lehman College, 250 Bedford Park Boulevard West, D 217A, Bronx, NY 10468-1589**. *Lehman College (CUNY) is an Equal Opportunity/Affirmative Action/ADA Employer.*

Postdoctoral Opportunities In The Biomedical Sciences.

The following research training opportunities are currently available at the National Institutes of Health.

Cardiovascular MRI **Robert S. Balaban, PhD**

The Laboratory of Cardiac Energetics is developing a new program in cardiovascular MRI techniques in the study of cardiac function, perfusion and viability in man. A devoted cardiac MRI system (1.5T) constructed specifically for cardiac MRI, in partner with industry, is being installed in the lab along with a 4T and animal scale systems. Extensive experience in MR imaging or spectroscopy is required. Laboratory of Cardiac Energetics (OE-110), Building 10, Room B1D-161, 10 CENTER DR MSC 1061, BETHESDA, MD 20892-1061.

Human Cytochrome P450s **Joyce A. Goldstein, PhD**

Human drug-metabolizing enzymes are under investigation. Polymorphisms are identified by cloning, PCR techniques, and sequencing. Recombinant proteins are expressed in cDNA expression systems, structure-function is studied by site-directed mutagenesis and reporter constructs used to study upstream regulatory elements. Applicants should have a background in molecular biology and must have less than five years of postdoctoral experience. Laboratory of Biochemical Risk Analysis (OE-110), NIEHS, P.O. Box 12233, Maildrop A3-02, Research Triangle Park, North Carolina 27709.

Investigative Skin Biology **Stephen I. Katz, MD, PhD**

Immunology, cell biology, gene therapy, molecular mechanisms of blistering diseases, cell-cell and cell-matrix adhesion, DNA repair, biological aspects of HIV infection, and viral oncogenesis are being investigated. Applicants should have a PhD degree or an MD. MDs must have a minimum of two years of training in dermatology. Dermatology Branch (OE-110), NCI, Building 10 Room 12N238, 10 CENTER DR MSC 1908, BETHESDA MD 20892-1908.

Molecular Immunology **Howard A. Young, PhD/Dan McUlcar, PhD**

Multiple positions are available. Candidates will perform molecular analysis of the transcriptional regulation of genes in lymphoid cell populations isolated from tumor bearing mice and cancer patients. Other candidates will study non-receptor tyrosine kinases and tyrosine phosphorylation in lymphoid and hematopoietic populations, must have less than five years of postdoctoral experience and be either US citizens or permanent residents. Laboratory of Experimental Immunology (OE-110), NCI-FCRDC, Building 560, Room 31-93, Frederick, MD 21702-1201.

Molecular Virology **T. Jake Liang, MD**

Current research focuses on the molecular pathogenesis and virus-host interactions of hepatitis B and C viruses. Elucidation of molecular mechanisms of HBV and HCV infections leading to chronic infection and development of hepatocellular carcinoma is also a major research effort. Several positions are available to study various aspects of molecular

virology and viral pathogenesis. Applicants should have a background in molecular and cell biology, virology or immunology and should have less than five years of postdoctoral experience. Digestive Diseases Branch (OE-110), NIDDK, Building 10, Room 9B07, 10 CENTER DR MSC 1800, BETHESDA MD 20892-1800.

Neurobiology **Carolyn B. Smith, PhD**

Protein synthesis in primary cultures of neurons and glia will be investigated with emphasis on tracer kinetics, amino acid compartmentation, and isolation of specific proteins. Applicants should have a PhD or an MD and less than five years of postdoctoral experience. A background in neuroscience and molecular biology is preferred. Laboratory of Cerebral Metabolism (OE-110), NIMH, Building 36, Room 1A05, 36 CONVENT DR MSC 4030, BETHESDA MD 20892-4030.

P-glycoprotein-mediated Drug Transport **Suresh V. Ambudkar, PhD**

The structure-function relationship of the multidrug resistance-linked P-glycoprotein and other related ABC transporters will be investigated. Biochemical, biophysical and molecular biological techniques will be employed in this work. Applicants should have a strong background in molecular biology and have less than five years of postdoctoral experience. Laboratory of Cell Biology (OE-110), Building 37, Room 1B-17, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

Additional Opportunities

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (wylbur.cu.nih.gov) or the World Wide Web (URL: [telnet:llwylbur.cu.nih.gov](http://telnet.llwylbur.cu.nih.gov)). When connected to NIH, key in ,*vt100* for terminal emulation, *F5E* for initials, and *AJL1* for account number. To view tenure track positions, *quit* the **POSTDOC** conference and *join* the **TENURE** conference.

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://llwww.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

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

Office Of Education

The NIH is an Equal Opportunity Employer

POSITIONS OPEN

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

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

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

IOWA STATE UNIVERSITY Department of Physics and Astronomy ASSISTANT PROFESSOR Experimental Condensed Matter Physics

Applications are invited for a **TENURE-TRACK** faculty position in experimental condensed matter physics (CMP) to begin in August 1996. Candidates are expected to have a Ph.D. in physics and a demonstrated record of research accomplishments normally achieved through postdoctoral experience. The department prides itself on excellent teaching and candidates are expected to show promise of being effective teachers. We seek the candidate with the strongest credentials and promise of future accomplishment in an emerging forefront area of condensed matter physics. Our CMP program presently includes 16 faculty, most with joint appointments with Ames Laboratory of the U.S. Department of Energy. Candidates with truly exceptional credentials may be considered for a senior-level appointment. Applicants should send a résumé (including a statement of research interests), publication list, and names, addresses, and telephone numbers of at least three references to: **Professor Eli Rosenberg, Chair, CMP Search Committee, Department of Physics and Astronomy, Iowa State University, Ames, IA 50011.** One of the three references should submit a letter at the time of application. Applications will be accepted until March 1, 1996 or until the position is filled. *Iowa State University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

DIRECTOR Cranberry Experiment Station

University of Massachusetts, Cranberry Experiment Station in East Wareham, an hour from Boston. A 12-month, non-tenure-track position with a five-year renewable contract. Available in July 1996. Position provides supervision and leadership of research and extension programs, coordination of relations with cranberry industry and state agencies, and establishment of an excellent, fundable research program addressing critical needs of the cranberry industry. Candidates should have a Ph.D. with demonstrated administrative ability, as well as research and outreach experience in a university, government or industry research setting in one of the following areas: agricultural engineering, crop production, or weed science. The Station has 11 staff, including four research scientists. Salary is competitive. For full consideration, applicants should send letter of application, curriculum vitae, transcripts, and the names, addresses, FAX and telephone numbers of three references by January 30, 1996 (or until position is filled) to: **Chair, Director Search Committee, Cranberry Experiment Station, P.O. Box 569, East Wareham, MA 02538-0569.** Address questions to: **Dr. Frank Caruso, Telephone: 508-295-2212; FAX: 508-295-6387.** *Affirmative Action/Equal Opportunity/Americans with Disabilities Act Employer.*

POSITIONS OPEN

GEORGIA INSTITUTE OF TECHNOLOGY

Applications and nominations are invited for **DIRECTOR** of the Center for Education Integrating Science, Mathematics and Computing (CEISM). The Director, who reports to the Dean of the College of Sciences, serves as an advocate for science and mathematics education in the State of Georgia, coordinates CEISM activities with similar initiatives on the Georgia Tech campus, and promotes innovations in the teaching-learning process, especially those involving the application of educational technology.

Applicants should have an earned Ph.D. with experience in scientific research and teaching at the college/university level, preferably in one of the disciplines represented within the College of Sciences. For applicants with the appropriate training and scholarly accomplishments, the appointment could lead to tenure in an academic unit of the College. Additional information concerning the position, and about CEISM's outreach activities, can be found on Web page <http://www.ceismc.gatech.edu>.

Interviews will begin in February 1996, but nominations and applications will be accepted until the position is filled. Applications should include a curriculum vitae and names and addresses of five references. Applications/nominations should be sent to: **CEISM Director Search, College of Sciences Dean's Office, Georgia Institute of Technology, Atlanta, GA 30332-0365.**

Georgia Tech is a unit of the University System of Georgia and an Equal Education and Employment Opportunity institution.

BUREAU DIRECTOR MEDICAL SERVICES EI

The Indiana State Department of Health, located in Indianapolis, is searching for a **LABORATORY DIRECTOR** to oversee a multifaceted public health laboratory. The laboratory is composed of clinical, environmental, food, drug, and dairy laboratory functions. The clinical laboratory is a highly complex laboratory performing clinical laboratory procedures and tests in all specialties, except histocompatibility, clinical cytogenetics and pathology services. Services include bacteriology, mycobacteriology, mycology, parasitology, virology, diagnostic immunology, and chemistry. Applicant must be a Doctor of Medicine or Osteopathy who can be licensed to practice in Indiana. Applicant must be Board-certified in Anatomic or Clinical Pathology by the American Board of Pathology or the American Osteopathic Board of Pathology, or possess qualifications that are equivalent to those required for such certification. Individuals with supervisory/administrative experience and proven leadership/expertise in public health issues are preferred. Please send letter of interest, curriculum vitae, three names and addresses of references, and salary history to: **D. Peter Maniago, Acting Assistant Commissioner, Operational Services, Indiana State Department of Health, P.O. Box 1964, Indianapolis, IN 46206-1964.**

The Indiana State Department of Health is an Equal Opportunity Employer through Affirmative Action.

FACULTY POSITIONS AIDS and Other Chronic Viral Infections Research

The Institute of Human Virology of the University of Maryland Biotechnology Institute (Medical Biotechnology Center) and the University of Maryland at Baltimore (School of Medicine) invite applications for **TWO TENURE-TRACK FACULTY** positions. M.D. or Ph.D., plus experience in clinical and/or basic research in chronic viral infections. Positions include a seed package for laboratory start-up. Faculty rank and salary are commensurate with experience. Review of applications will begin on January 15, 1996, and will continue until suitable candidates are selected. Send updated curriculum vitae to: **Robert C. Gallo, M.D., Director, Institute of Human Virology, 618 West Lombard Street, 2nd Floor, Baltimore, MD 21201.** *The University of Maryland System is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are encouraged to apply.*

JAMES E. BIRREN CHAIR

The Andrus Gerontology Center at the University of Southern California is seeking a **SENIOR SCIENTIST** with long-term contributions to the neurobiology of aging. A description of research interests and a résumé should be sent by March 1, 1996 to: **Search Committee, Andrus Gerontology Center, University of Southern California, University Park MC 0191, Los Angeles, CA 90089.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PARASITOLOGIST

Tenure-track position at the beginning or experienced **ASSISTANT PROFESSOR** level. Candidates must have a Ph.D. and be qualified to teach courses in general parasitology, medical parasitology, and introductory biology. The candidate should also be able to direct undergraduate and graduate student research. Applicants with molecular and immunological training are encouraged to apply.

All applications received by February 1, 1996 will receive full consideration. However, the application period will remain open until the position is filled. Send letter of application, curriculum vitae, transcripts, and names, addresses, and telephone numbers of three references, and a statement of professional goals, to: **Dr. Thomas G. Froiland, Department of Biology, Northern Michigan University, Marquette, MI 49855-5341. Telephone: 906-227-2310.**

Northern Michigan University does not discriminate on the basis of race, color, national origin, gender, disability, or age in its programs or activities. Persons having civil rights inquiries may contact the Affirmative Action Office at 906-227-2420. Persons having inquiries regarding Americans with Disabilities Act (ADA) may contact the ADA Coordinator at 906-227-1737.

MOLECULAR GENETICIST

A **TENURE-TRACK** position will be available August 1996, contingent on funding, for a candidate with expertise in genetic analysis of developmental, evolutionary, or biomedical problems at the molecular level. The successful applicant must hold a doctorate (postdoctoral experience preferred), have a strong commitment to undergraduate education, work with students from the undergraduate to the doctoral level, and develop a research program that complements departmental strengths in anatomy, botany, ecology, molecular biology, or physiology. The primary teaching responsibility will be general genetics, but the successful candidate will also participate in introductory courses and offer a course in his or her area of specialization. The search will continue until position is filled. Please send a letter of application, curriculum vitae, and statements of research goals and teaching philosophy, and have three letters of recommendation sent by February 15, 1996, when review will begin, to: **Genetics Search Committee, Department of Biological Sciences, Box 8007, Idaho State University, Pocatello, ID 83209-8007.** *Idaho State University is an Equal Opportunity/Affirmative Action Employer.*

HEAD DEPARTMENT OF BIOLOGY

Western Kentucky University (<http://www.msc.wku.edu>) invites nominations and applications for a 12-month, tenure-track position as **HEAD** of the Biology Department beginning August 1996. The 22-member department offers B.S. degrees in biology, recombinant genetics, medical technology, and biochemistry; maintains an active M.S. program; and coordinates pre-professional programs.

Requirements: earned Ph.D. in biology; qualification for tenure at the level of full professor; strong administrative and interpersonal leadership skills; demonstrated excellence in undergraduate instruction and externally funded research. Duties include participation in teaching, research, and community service. Send curriculum vitae, statements of scholarly interest, educational and administrative philosophies and priorities, and four letters of recommendation to: **Headship Search Committee, Department of Biology, Western Kentucky University, 1 Big Red Way, Bowling Green, KY 42101-3576.** Review of applications begins January 19, 1996. *WKU is an Affirmative Action/Equal Opportunity Employment institution. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR MEDICINE-INFECTIOUS DISEASES

Stanford University seeks a tenure-line **ASSISTANT PROFESSOR** to develop a research program integrating basic science with population biology, epidemiology, and/or clinical ID. Research should address issues of public health importance. The successful applicant will attend on the clinical service and must be Board-eligible/Board-certified in ID. Those interested should send a curriculum vitae with names of three references to: **Julie Parsonnet, M.D., HRP Building, T225, Stanford University, Stanford, CA 94305-5092.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and encourages applications from such candidates.*

POSTDOCTORAL RESEARCHERS



The Genentech Postdoctoral Program consists of more than 50 Researchers and is a vibrant and intensive environment for advanced

scientific training. Postdoctoral Researchers conduct basic research in the areas of our scientific interest, publish in scientific journals, attend and present work. All candidates should have a PhD and/or MD degree with a strong background in the appropriate field.

Cardiovascular Research:

Two positions are available.

One position will focus on the regulation of angiogenesis, investigating the role of VEGF and other factors in normal and abnormal angiogenesis by molecular, cellular and in vivo approaches. See Science 246, 1306 (1989); Science 255, 255 (1992); PNAS 89, 698 (1992); Nature 362, 841 (1993); J. Biol. Chem. 269, 25646 (1994); NEJM 331, 1480 (1994). Manager: Dr. Napoleone Ferrara. Reference: PDNF.

The other position will focus on cardiac hypertrophy and heart failure using novel cloning approaches, combined with mouse gene knockout and transgenic technology. Manager: Dr. David Lowe. Reference: PDDL.

Pharmacokinetics & Metabolism

A position is available to study the mechanisms of uptake and intracellular transport of growth factors, focusing on understanding the specific function(s) that ligands targeted to the nucleus play(s) in the overall biological response of the cell. Manager: Dr. Gilbert Keller. Reference: PDGK

Endocrine Research

A position is available to explore the metabolic consequences of hormonal gene knockout or attenuation in animal models of human disorders. See Journal of Clinical Investigation 95:2258-2265 (1995); Endocrinology, Vol 1 (3rd ed), pp 280-302 (1995). Manager: Dr. Michael Cronin. Reference: PDMC

Molecular Oncology

A position is available to study hematopoietic stem cell development utilizing molecular, cellular and genetic approaches to identify and study genes that control commitment, differentiation, and self-renewal. See Cell, 65, 1143 (1991); Blood 84, 2422 (1994); Blood 84, 4045 (1994) and PNAS, 92, 1866 (1995). Manager: Dr. Bill Mathews. Reference: PDBM

Two postdoctoral positions will be available in April 1996 to investigate the pathogenesis of diabetes.

One position is for a cellular immunologist to investigate the role of interferons in autoimmune diseases. See: Diabetes 44, 685 (1995); Immunity, 1, 469 (1994); Science 260, 1942 (1993); Science 259, 1739 (1993). Manager: Dr. Tim Stewart. Reference: PDT51

Another position is available for a molecular/cellular biologist to study the development and function of the beta cell or the control of insulin signaling. See: Nature 373, 448 (1995); Cell, Vol 83, pp69-78 (1995); J. Biol. Chem., Vol 270, pp22085-22088 (1995). Manager: Dr. Tim Stewart. Reference: PDT52

Bioanalytical Development

This position will work on a project to elucidate morphological and functional heterogeneity of human monocyte/macrophage system. Training in cell and molecular biology required and experience in fluorescence microscopy techniques preferred. See Mol. Cell Biochem. 124, 67-79 (1993); Prog. Lipid Res., 30, 237-243 (1991); Atherosclerosis 38, 175-184 (1991); Atherosclerosis 77, 221-225 (1989). Manager: Dr. Eugen Koren. Reference: PDKO

Cell Biology

Postdoctoral fellow to work on the regulation of development of pancreatic protodifferentiated cells into islets using an in vitro approach in collaboration with molecular biologists and physiologists. See Endocrinology 136:849 (1995); Ann Rev. Physiol. 57:219 (1995). Manager: Dr. Jennie Mather. Reference: PDJM

Antibody Engineering

Positions are available to identify novel tumor and tumor vasculature antigens using antibody phage and to engineer human neutrophil elastase for ADEPT. Prior training required in two or more of the following areas: molecular biology, phage display, protein biochemistry or cancer biology. See PNAS 89 (1992); J. Exp. Med. 175 (1992) 217; PNAS 92 (1995) 1327; Cancer Research 55 (1995) 63; Chemistry and Biology 2 (1995) 223. Manager: Dr. Paul Carter. Reference: PDPC.

Molecular Biology

Positions are available to identify novel cell surface receptors and their ligands and to study receptor biology and cell signaling in variety of systems, including growth hormone, flt4, and gp130 receptor systems. See PNAS 92, 1142 (1995); JBC 270, 10915 (1995); JBC 270:7021 (1995); and Science 253, 1278 (1991). Manager: Dr. William Wood. Reference: PDWW

Protein Engineering

Two positions are available, one starting 12/96 and the second 1/97. Both positions involve studying molecular recognition of protein-protein interactions, including hormone-receptor interactions. Candidates should have a strong background in Biochemistry/Biophysics/Organic Chemistry with interests in protein design. See: Science, 256, 1677-1680 (1992); Science 260, 1113-1117 (1993); Science 266, 243-247 (1994); Proc. Natl. Acad. Sci. USA 91, 12544-12548 (1994); Science 267, 383-386 (1995); Biochemistry 34, 13312-13319 (1995). Manager: Dr. James A. Wells. Reference: PDJW

Genentech offers an excellent salary and benefits package which includes free health club membership and fully paid medical, dental and vision coverage.

Please send your resume to Genentech, Inc., Human Resources, Attn: Reference XXXX (see code in above job descriptions), 460 Pt. San Bruno Blvd., South San Francisco, CA 94080. Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

Genentech, Inc.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

Wheeling Jesuit College, a Jesuit liberal arts college located one hour from Pittsburgh, invites applications for a **TENURE-TRACK** position beginning fall 1996. In addition to general biology courses, the successful candidate will teach classes primarily in anatomy, physiology, and cardiopulmonary physiology to nursing and clinical science students. Participation in research is encouraged. A Ph.D. and some teaching experience are required; interest and experience in departmental administration is desirable. Applicants must be willing to participate actively in the pursuit of the College's mission as a Jesuit institution. Send cover letter, curriculum vitae, transcripts, and three letters of recommendation by January 15, 1996 to: **Susan Tate, Director of Human Resources, Wheeling Jesuit College, 316 Washington Avenue, Wheeling, WV 26003.** Women and minorities are strongly encouraged to apply. *Affirmative Action/Equal Opportunity Employer.*

Research/Biological Physics: **RESEARCH INSTRUCTOR.** Developing new instrumentation of STM/AFM for imaging biological molecules at very high resolution. The duties of the position include mechanical and electronic circuit/interface design, real time and graphic analysis programming, and supervision of other STM/AFM users. Applicant must have a Ph.D. in physics or equivalent degree, two years of postdoctoral training or working experience of STM/AFM. Experience in STM/AFM construction and imaging biological molecules are required. Full-time, grant supported position, salary dependent on experience. Send résumés and three letters of recommendation to: **Dr. Zhifeng Shao, Department of Molecular Physiology and Biological Physics, Box 449, University of Virginia, Charlottesville, VA 22908.**

ASSISTANT PROFESSOR

Le Moyne College, a small liberal arts college in the Jesuit tradition, has two tenure-track openings at the **ASSISTANT PROFESSOR** level for the fall of 1996. Successful candidates must have a Ph.D. as well as teaching experience at the undergraduate level. Applicants will be expected to maintain a modest research program and direct undergraduate research. The first position is for a Vertebrate Physiologist with training in human anatomy and physiology. Responsibilities will include teaching a full year human anatomy and physiology course in a newly developed Physician Assistant Program, upper-level classes for biology majors, and non-majors courses. The second position is for a Biochemist; responsibilities will include teaching a full year biochemistry course for biology and chemistry majors and a one semester clinical biochemistry course in the Physician Assistant Program. Send curriculum vitae and three references by 1 February 1996 to: **Lynn McMartin, Director of Human Resources, Le Moyne College, Syracuse, NY 13214.** *Le Moyne College is an Affirmative Action/Equal Opportunity Employer.*

TOXICOLOGIST

The Department of Physiological Sciences, College of Veterinary Medicine, University of Florida is seeking applications for a tenure-track **ASSISTANT PROFESSOR** level position in toxicology. Instructional activities will include developing course materials and teaching in undergraduate, graduate, and/or professional toxicology courses. The successful candidate will participate in graduate and/or postdoctoral training programs as appropriate. Expected to develop a productive, extramurally funded program of research. A Ph.D. degree is required and postdoctoral experience is preferred. The successful candidate will also be an active participant in the University of Florida Center for Environmental and Human Toxicology. Send a letter of application, curriculum vitae, and names and addresses of three references to: **Dr. Stephen M. Roberts, Search Committee Chairman, Department of Physiological Sciences, College of Veterinary Medicine, P.O. Box 100144, University of Florida, Gainesville, FL 32610-0144.** The deadline for applications is March 1, 1996, with an anticipated start date of July 1, 1996. *The University of Florida is an Affirmative Action/Equal Opportunity Employer/Educator.*

POSITIONS OPEN

Applications are invited for the position of **CHAIRPERSON** of the Department of Physiology and Biophysics at the School of Medicine, at the State University of New York at Stony Brook. The successful candidate will hold a Ph.D. or M.D. degree, will be an academic leader in the School of Medicine, and will be a senior investigator with a strong research program. The present faculty consists of active investigators in biophysics and molecular physiology. Departmental faculty provide required courses in the medical curriculum and participate in multidisciplinary graduate programs that include an active NIH-funded training grant in biophysics based in the department. Other teaching activities are in the School of Nursing and School of Health Technology. The biomedical sciences at Stony Brook are in a period of strong growth with major resources being committed to this recruitment.

Applications must be received by April 15, 1996. They should include a curriculum vitae and a letter detailing research interests and administrative and teaching experience. The names and addresses of five references should also be furnished. The applications should be sent to: **Dr. Lorne M. Mendell, Chair, Physiology and Biophysics Search Committee, Office of the Dean, School of Medicine, Stony Brook, NY 11794-8430.** *An Affirmative Action/Equal Employment Opportunity Employer.*

Applications are requested for an **ASSISTANT PROFESSOR** (tenure-track) position in the Institute of Chemical Toxicology. Applicants should have extensive knowledge of cell culture (primary and immortalized cell lines) and molecular biology techniques, experience in the operation and management of a cell culture facility, an ability to interact with basic and physician scientists, and an independently funded research program examining the effects of chemicals on gene expression using cultured cells. A curriculum vitae and three reference letters should be sent to: **Dr. Raymond F. Novak, Director, Institute of Chemical Toxicology, 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654.** Wayne State University—People working together to provide quality service. All buildings, structures and vehicles at WSU are smoke-free. Applications must be received no later than February 15, 1996. *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DEAN, Science and Allied Health. Work with dean, faculty, staff to develop academic programming; sponsored research and scholarship, external partnerships. Requires earned doctorate, credentials for tenure, leadership experience; desire science background, allied health experience. Start August 26, 1996. Application letter; curriculum vitae; four reference names, addresses, telephone numbers to: **Associate Dean Search Chair, College of Science and Allied Health, University of Wisconsin-La Crosse, La Crosse, WI 54601.** Email: senger@csfac.uwlax.edu. Complete announcement from same. All materials must be received by February 23, 1996. All positions contingent on funding. Names of applicants who haven't requested confidentiality in writing, and all finalists, must be released on request. *Women, minorities encouraged to apply. Affirmative Action/Equal Opportunity Employer.* <http://www.uwlax.edu>

DEAN, COLLEGE OF SCIENCE WEBER STATE UNIVERSITY

Applications and nominations are invited for the position of **DEAN** of the College of Science. Weber State University (WSU) is a public institution enrolling 14,000 students. The College is composed of 48 faculty and 15 staff members in botany, chemistry, geosciences, microbiology, physics, and zoology. The search committee will begin screening February 1, 1996. For further information, please write to: **Science Dean Search Committee, Office of the Provost, Weber State University, 1016 University Circle, Ogden, UT 84408-1016.** Email: dstlie@weber.edu. *WSU is an Equal Opportunity/Affirmative Action Employer.*

ACQUISITION EDITORS

Academic Press is seeking **EDITORS** in life and biomedical science. Candidates must have an advanced degree in a basic science. Previous publishing experience not required. Must have strong interpersonal skills, and be familiar with scientific literature. Please send brief cover letter and succinct résumé to: **Academic Press, Human Resources Department, 525 B Street, Suite 1900, San Diego, CA 92101.** *Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR IMMUNOLOGY Morehouse School of Medicine

Scientists with research expertise in areas of contemporary molecular or cellular immunology are invited to apply for two regular faculty positions in the Department of Microbiology and Immunology. Candidates for **ASSISTANT PROFESSOR** must have current postdoctoral experience and demonstrated ability to direct an independent research program and obtain extramural research funding. Candidates for **ASSOCIATE PROFESSOR** must have a record of current research productivity and funding. Morehouse School of Medicine is a young institution dedicated to the training of underrepresented minorities in medicine and graduate biomedical sciences, and to excellence in research. State-of-the-art research facilities plus individual start-up support will be available to the appointees. These positions offer the opportunity for full and rewarding scholarly growth. *Underrepresented minorities and women are particularly encouraged to apply.* Applicants should submit a curriculum vitae, statement of research background and plans, and names of three references to: **Gordon B. Bailey, Ph.D., Chair, Department of Microbiology and Immunology, Morehouse School of Medicine, 720 Westview Drive, Atlanta, GA 30310.** FAX: 404-752-1179.

The Biology Department at the University of Wisconsin Oshkosh seeks applicants for a **TENURE-TRACK ASSISTANT PROFESSOR** position in mycology beginning September 1, 1996. Ph.D. required; postdoctoral and teaching experience desirable. Responsibilities: teach mycology, biological concepts-diversity (introductory course), develop upper-level course in an area such as phytopathology, soil microbiology, mycorrhizal biology, or industrial mycology; develop a mycological research program, pursue extramural funding and supervise M.S. theses. Send letter of application, résumé, three current letters of recommendation, and official transcripts to: **M. A. Rouf, Chair, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901** by February 15, 1996. *Affirmative Action/Equal Opportunity Employer.*

The Center for Agricultural Biotechnology has immediate opening for **Molecular Virology and Mycology RESEARCH SCIENTIST** in area of chestnut blight fungus pathogenesis and biology. Applicants must have experience in developing/implementing RNA virus transfection systems and differential display technology, with extensive knowledge of the molecular biology of RNA viruses and filamentous fungi. Ph.D. and five years of postdoctoral research experience are required. Send curriculum vitae and names, addresses, and telephone numbers of five references by February 1, 1996, to: **Research Scientist Search, Center for Agricultural Biotechnology, 2111 Building 296, University of Maryland, College Park, MD 20742-3351.** *Equal Opportunity/Affirmative Action Employer.*

BIOCHEMICAL RESEARCHER needed for developer and manufacturer of biotech products in northeast Ohio. Job duties: Oversee the isolation, purification, and characterization of the extracellular matrix proteins to obtain pure components for application in biomedical and cosmetic research. Analysis of latex products for proteins. Preparation of industrial quantities of precast gels for electrophoresis of proteins for research and educational market involving all types of polyacrylamide gels from micro to macro and from straight to gradient percentages. Chromatographic separation of proteins and nucleic acids at micro levels. Characterization of the isolated and purified fractions by spectrophotometry and electrophoresis. Job requirements: Bachelor of Science in organic chemistry and/or biochemistry. Minimum of four years of experience in job offered or as biochemist; four years of experience must be in the areas of chemistry/biochemistry, proteins and nucleic acids, and micromethods in molecular biology; 40 hours per week, 9 a.m. to 5 p.m., Monday to Friday; \$46,000 per year. Send two résumés and cover letter (no calls) to: **D. Gehl, Reference Number 1411, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

1996 FASEB Summer Research Conferences

Saxtons River Vermont

Lymphocytes and Antibodies
Enzymes that Act on Nucleic
Acids
Virus Assembly
Neural Mechanisms in
Cardiovascular Regulation
Calcium and Cell Function
Retinal Neurobiology and Visual
Processing
Molecular Biophysics of Cellular
Membranes
Protein Folding and Assembly in
the Cell
Folic Acid, Vitamin B12 and One
Carbon Metabolism
Plant Development

Copper Mountain Colorado

Signal Transduction in Plants
Retinoids
Mechanisms of Maturation,
Function and Decay in the
Prokaryotic RNA World
Receptors and Signal
Transduction
Neural-immune Interactions in
Injury and Disease: Molecules
and Mechanisms
Protein Phosphatases
Splanchnic Circulation
Molecular Genetic Basis of Cell
and Tissue Structure and
Function
Neurobiology of CNS Injury
Transport ATPases

Snowmass Village Colorado

Principles in Viral, Bacterial,
Fungal, and Protozoan
Pathogenesis
Yeast Chromosome Structure,
Replication and Segregation
Sorting/Intracellular Transport of
RNA
Neurofibromatosis
New Trends of Fc Receptor
Research
Cellular and Molecular
Mechanisms of Liver Growth
Regulation
Transcriptional Regulation during
Cell Growth, Differentiation,
and Development
Clonal Senescence and
Differentiation

To receive complete conference schedules and the application form (available in Feb., 1996), contact:

9650 Rockville Pike FASEB Summer Research Conferences Office
Bethesda, MD 20814-3998 FAX 301-571-0650 E-mail: src@faseb.org

DO NOT SEND REQUEST IF YOU ARE A MEMBER OF FASEB. A MEETING BOOKLET WILL AUTOMATICALLY BE SENT TO YOU.

S

NAME _____

DEPARTMENT _____

AFFILIATION _____

ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____ COUNTRY _____

**MetroHealth Medical Center and
Case Western Reserve University**



Head of Genotyping



MetroHealth Medical Center is developing a program of genetic mapping to identify genes and mutations involved in polygenic diseases. As a corollary, genetic epidemiology is being initiated within the greater Cleveland research community and will use population resources distributed throughout the world. The new head of genetic mapping would be expected to establish and develop improved techniques for high-throughput genotyping. The successful candidate should have or establish a well-funded independent research program.

A tenure track appointment at the Associate/Full Professor level at Case Western Reserve University is negotiable and will be assigned based on the applicant's interest and expertise. Initial funding and laboratory space will be provided by MetroHealth Medical Center. Send application letter, curriculum vitae, statement of research interests, reprints of two key publications, and the names and addresses of three references to: **Arthur Brown, M.D., Ph.D., Vice President for Research, R319 Rammelkamp, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, Ohio 44109-1998.**



**Agricultural
Research
Service** United States
Department of
Agriculture

RESEARCH GENETICIST (PLANTS) GS-12/13, SUGARBEET & BEAN RESEARCH UNIT, located in the Crop and Soil Sciences Department, Michigan State University, East Lansing, Michigan, is seeking an individual to develop and execute a basic and applied research program to release new and beneficial sugarbeet germplasms with good emergence and seedling vigor, high sucrose content, disease resistance and smooth root conformation. Particular attention will be placed on the application of biotechnology to the development of novel genetic materials and beneficial germplasms for use by public and private breeders. The incumbent will use traditional and molecular approaches in solving problems while working independently and as part of a team accomplishing research goals. Cooperation with Michigan and national sugarbeet industries is expected. The use of molecular techniques will lead to the identification of new genetic markers, elucidate the genetic control of economic traits and establish linkage relationships with markers. The use of morphological, biochemical, and molecular markers is expected to facilitate marker-assisted selection to introgress useful traits into improved germplasm. The research assignment requires graduate education and/or professional research experience that provides knowledge of professional plant genetics and the ability to apply state-of-the-art genetic principles to a plant breeding program. Knowledge of plant biotechnology and the ability to conceive and conduct experiments, and publish results is required. Salary commensurate with experience (\$43,658-\$51,915). U.S. citizenship required. For information about the position, contact Dr. George Hosfield on (517) 355-0110. For application forms call Amy Hegarty on (301) 344-4567, between 5 a.m. and 4 p.m. (Eastern Time); identify announcement #ARS-D6N-042. **INCOMPLETE APPLICATIONS WILL NOT RECEIVE CONSIDERATION.** Complete applications must be postmarked by February 8, 1996. *USDA/ARS is an Equal Opportunity Employer.*

**ASSISTANT PROFESSOR
OF FOREST ECOLOGY**

The Department of Forestry at Michigan State University is seeking applicants for a full-time (12-month) tenure-track, assistant professor of forest ecology position (70% research, 30% teaching appointment). The successful applicant is expected to build a nationally recognized scholarly research program in forest ecosystem ecology; teach two semester courses per year in forest ecology, one at the undergraduate and one at the graduate level; be actively involved in M.S. and Ph.D. graduate education; and contribute to the interdepartmental Ecology and Evolutionary Biology Program. Candidates must have a Ph.D. in plant or forest ecology and at least one degree in forestry. A commitment to excellence, an interest in working with the woody component of forested ecosystems, a knowledge of current research technologies in plant ecology, and professional experience in ecology research and teaching are primary search criteria.

Applications will be accepted until February 29, 1996 or until the position is filled. The university is committed to building a diverse faculty, so candidates from underrepresented groups are especially encouraged to apply. A complete application will consist of a letter of intent, curriculum vitae, and four letters of reference. Send this application to:

**Melvin R. Koelling, Chair
Ecology Search Committee
Department of Forestry
Michigan State University
East Lansing, MI 48824-1222**

Phone inquiries can be directed to the search committee chair at (517) 355-0096.

DMC

**Wayne State University
University
Laboratories**

**MEDICAL DIRECTOR
CHEMISTRY LABORATORIES**

The Departments of Pathology, Wayne State University and the Detroit Medical Center (DMC) seek an academic pathologist for the position of Medical Director of Chemistry and Toxicology Laboratories for DMC University Laboratories. Wayne State University School of Medicine is associated with the Detroit Medical Center, a large urban medical center composed of seven hospitals which are served by a centralized Core Laboratory. The Medical School campus includes a Level I Trauma Center, a Children's Hospital, a Rehabilitation Institute, and two adult hospitals. Two additional DMC community hospitals are within twenty miles of the campus. Applicants should be Board Certified in Clinical Pathology with a subspecialty interest in Chemistry and Toxicology. Apart from providing service to the DMC Institutions, the Core Laboratory supports the efforts of an expanding out-reach program. The combined work load for the Chemistry and Toxicology Laboratories is in excess of five million results per year. Apart from teaching and service responsibilities, the successful applicant will be encouraged to develop a research program. Please address applications, including a *curriculum vitae* and the names of three references to **John Crissman, MD, Professor and Chair of Pathology, Wayne State University School of Medicine, 540 East Canfield, Detroit, Michigan 48201.** *WSU is an Equal Opportunity Employer.*

**POSTDOCTORAL FELLOW
Molecular Biology**

IDEC Pharmaceuticals is a leader in the development of immunologically active monoclonal antibodies for therapeutic applications in the area of certain cancers and autoimmune disorders. We pride ourselves in the excellence of our team members and invite you to join our growing team.

This position will focus on genetic engineering of recombinant antibodies, ligands, receptors, and antigens for the development of antibodies to treat autoimmune and allergic diseases and on leading a research project to develop therapeutic viral and cancer vaccines utilizing IDEC's adjuvant formulation. Qualified candidates will have a Ph.D. in immunology, molecular immunology, molecular biology, or related fields, with significant experience in both genetic engineering and immunology. It is an added advantage to have experience in tissue culture, transfectoma, bacterial expression of recombinant proteins, protein structure/function analysis, and cellular immunology.

We offer a competitive compensation package and excellent working conditions. Please send your resume to: **IDEC Pharmaceuticals Corp., MI Ad, 11011 Torreyana Rd., San Diego, CA 92121.** *EOE.*



QUINNIPIAC COLLEGE

Assistant Professor Inorganic Chemistry - Tenure Track

The Department of Chemistry and Physical Sciences at Quinnipiac College invites applications for a tenure-track position starting in Fall, 1996. Applicants must have a Ph.D. in Inorganic Chemistry and proficiency in instrumental analysis. Teaching duties will be primarily in the area of general chemistry for allied health majors and all-college core curriculum science. In addition, the faculty member will teach inorganic chemistry and instrumentation as required by the Department. The successful applicant must have a strong commitment to undergraduate teaching and be able to plan and direct appropriate research for undergraduate chemistry majors. Teaching experience is required.

Quinnipiac College is an independent, non-sectarian coeducational institution located at the foot of the 1,500 acre Sleeping Giant Mountain State Park in Hamden, Connecticut, approximately 10 miles from downtown New Haven and 1 1/2

hours from New York City. The college boasts an outstanding physical plant of 37 buildings, many of which have been constructed in the past ten years. The College emphasizes community to its 3,000 undergraduate and 2,000 graduate students in its five Schools of Business, Health Sciences, Liberal Arts, Law and Graduate and Continuing Education. Approximately 85% of the undergraduates reside on campus, and the student body includes traditional and non-traditional students from 25 states and 18 foreign countries.

Interested candidates should submit a letter of application, transcripts, a resume and three letters of recommendation to: **Chairperson, Department of Chemistry and Physical Sciences, Quinnipiac College, Hamden, CT 06518.** Review of applications will begin on February 15th, 1996 and will continue until the position is filled.

Quinnipiac College has a strong commitment to the principles and practices of diversity throughout the college community. Women, minorities and individuals with disabilities are invited and encouraged to consider this opportunity and to apply.



CHIEF

LABORATORY FOR ASTRONOMY AND SOLAR PHYSICS

The NASA/Goddard Space Flight Center invites applications and nominations for this position, located in Greenbelt, Maryland. The vacancy may be filled as either a permanent Senior Executive Service position or on a time limited basis through an appropriate university or intergovernmental arrangement.

The Chief of the Laboratory for Astronomy and Solar Physics is responsible for developing and conducting a broad program of experimental and theoretical research, in specific areas of space science. These areas include: highly advanced state of the art studies of the properties of astrophysical sources with emphases on the Sun, comets, stars, the interstellar medium, stellar clusters, galaxies, galaxy clusters and the early universe; the development of space astronomy instruments; and laboratory and theoretical investigations in support of astrophysical studies from space. The incumbent participates in the overall development and implementation of the Center-wide space science objectives.

The Chief performs individual research and may act as a principal investigator, co-investigator, or a project scientist on NASA missions. Participation on Agency-wide panels and committees is also required of the incumbent.

Desirable qualifications include a Ph.D. degree with extensive post-graduate research experience as well as experience in the scientific and administrative management of research programs which has established the candidate as an authority in astronomy, astrophysics, and/or solar physics. The candidate should also possess demonstrated executive management abilities commensurate with the high level management responsibilities of this position.

Compensation is range is currently \$107,300 to \$122,040 per annum, including locality pay. Submit OF 612, "Optional Application for Federal Employment" or any other written format you choose and a supplemental statement addressing the SES Executive Core Qualifications and the Technical Qualifications of the position. Mail applications to:

Keith P. Lowe
Human Resources Operations Office, Code 113.8
Office of Human Resources
NASA/Goddard Space Flight Center
Greenbelt, MD 20771

For more information about position requirements and application procedures, please call Mr. Lowe at (301) 286-9951 or (301) 286-7918 (TDD).

Complete application must be postmarked by January 23, 1996

Equal Opportunity Employer

U.S. citizenship required.

POSTDOCTORAL POSITIONS: MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

Applications are invited for postdoctoral positions in the Department of Molecular Microbiology and Immunology at the University of Missouri, School of Medicine, Columbia, Missouri. General areas of research include:

- Molecular aspects of microbial pathogenesis and microbial immunology
- Molecular approaches to immunobiology and immunochemistry; mechanisms of B-cell activation, induction of autoimmunity, class I antigen presentation, T lymphocytes, lymphocyte trafficking, mucosal immunity, protective immunity against HIV
- Regulation of gene expression in prokaryotic and eukaryotic systems including: iron regulated operons in *E. coli*, mycoplasma and yeast systems, and molecular virology (DNA viruses and retroviruses)
- Membrane structure and function; mechanisms of phenotypic switching; surface antigen variation
- Intracellular signaling mechanisms in neutrophils, lymphocytes, yeast
- Mechanisms of oncogene action in eukaryotes
- Vaccine development
- Early nematode development
- Pathogenic mechanisms of *Vibrio cholerae*, *Haemophilus influenzae*, *Burkholderia cepacia*, *Borrelia*, *Rickettsia* and *Ehrlichia*

Complete descriptions of research programs are available. Applicants should direct their inquiries to:

Ms. Sandy Selby, Department of Molecular Microbiology and Immunology
University of Missouri, M653 Medical Sciences Bldg.
Columbia, Missouri 65212

Phone (314) 882-8989 Fax (314) 882-4287

Qualified applicants may be supported by a departmental NIH training grant, an interdisciplinary Molecular Biology Program fellowship, or individual research grants.

*The University of Missouri is an Equal Opportunity Employer
and encourages applications from females and minorities.*

National Health Research Institutes Taiwan, (Republic of China)

A National Health Research Institutes (NHRI) was recently established by the Government of the Republic of China in Taiwan as a non-profit research organization aimed at promoting medical, pharmaceutical, and public health research and improving the health and well-being of citizens in the country. In addition to the role of being a funding agency, NHRI also conducts intramural research in the following research divisions: Gerontology, Environmental Health and Occupational Diseases, Mental Health and Drug Abuse, Biotechnology and Pharmaceutical Technology, Health Policy, Biomedical Engineering and Clinical Research. Applicants with appropriate qualifications and experience are invited to apply for the following positions.

Director of research division
Distinguished Research Scientist
Research Scientist
Associate Research Scientist
Assistant Research Scientist

Various levels of Research Scientists are equivalent to Chair Professor, Professor, Associate Professor and Assistant Professor in major U. S. universities.

Applications or nominations should consist of a cover letter, a curriculum vitae including list of publications and copies of representative reprints, a research proposal (maximum of 1000 words) as well as the names, addresses and telephone and/or fax numbers of five references. Applications and nominations should be sent to: **Dr. Cheng-Wen Wu**, 3F, No.2, Sec. 2, JEN AI Rd., TAIPEI, TAIWAN, R.O.C. Tel : 886-2-3519122. Fax: 886-2-3221807.

INHERENTLY CONDUCTIVE POLYMERS: AN EMERGING TECHNOLOGY

A three-day comprehensive tutorial seminar intended for engineers and research scientists

Feb. 28 - March 1, 1996

Ocean Resort Hotel and Conference Center, Deerfield Beach, FL

Outline: Various aspects of conductive polymers including: materials structure and properties, processing and fabrication, orientation, stability. Particular emphasis on technology and applications.

In addition to the core tutorial given by **Dr. M. Aldissi**, the following speakers will each present a one hour lecture on aspects of conductive polymer technology and applications and will display samples of products:

Dr. Anthony Guiseppi-Elie, ABTECH Scientific, Inc.; Conducting Polymers as Chemical and Biosensors
Dr. Duane Finello, Eglin Air Force Base; Conducting Polymers in Double Layer Capacitors
Dr. Richard Gregory, Clemson University; EMI Shielding Applications of Conducting Polymers
Dr. Friedrich Jonas, Bayer Corp.; Novel Polythiophenes and Applications
Dr. Hans Kuhn, Milliken Research Corp.; Conductive Polymer Fabrics/Kontex
Dr. V. G. Kulkarni, Americhem, Inc.; Polyanilines and applications

The registration fee is U.S. \$1,050.00. For more information, contact **Dr. M. Aldissi**, Advanced Polymer Courses, 536 Main Street, Unit # 1, Falmouth, MA 02540. Tel.: 508-540-9587, Fax.: 508-540-7621, 74037.1361@compuserve.com.

This Seminar is co-sponsored by ABTECH, Americhem, Inc., Bayer Corp. and Milliken Research Corp.

GLOBAL CAREER OPPORTUNITIES



UNIVERSITY OF CAMBRIDGE
Department of Plant Sciences
Mycologist



University Lectureship or University Assistant Lectureship

Applications are invited for a Lectureship or Assistant Lectureship in the Department of Plant Sciences. The successful applicant will have a proven research record and will be expected to contribute to the teaching of microbiology in the Department. Preference will be given to a fungal physiologist with appropriate skills in cellular and molecular biology. The Department has strong interests in molecular microbiology, virology, and plant epidemiology.

The appointment will be for three years with the possibility, for a University Lecturer, of reappointment to the retiring age or, for a University Assistant Lecturer, of reappointment for two years. The statutory limit of tenure of a University Assistant Lectureship is five years, but all holders of the office of University Assistant Lecturer are considered for possible appointment to the office of University Lecturer during their course of tenure.

The pensionable scales of stipends are:

University Lecturer: £18,294 a year, rising by eleven annual increments to £28,215. There is no grade of Senior Lecturer.

University Assistant Lecturer: £15,154 a year, rising by six annual increments to £19,848.

Applications (six copies) should include a curriculum vitae, list of publications, statement of intended research and the names of not more than three referees. They should be sent to Katherine Brown, Departmental Administrator, Department of Plant Sciences, Downing Street, Cambridge CB2 3EA, from whom further information may also be obtained. Applications should be received not later than 1st February 1996.

The University is an equal opportunities employer and aims to achieve the highest quality in teaching and research.

Cardiovascular Research

Physiology Research Coordinator - Senior Lecturer, tenurable, Gold Coast Campus

The Faculty of Nursing and Health Sciences wishes to appoint a Senior Lecturer in Physiology who will contribute to teaching physiology up to the fourth year level and coordinate research in the physiology laboratory of the Rotary District 9600 Centre for Cardiovascular Research.

The successful applicant will hold a PhD/MD in cardiovascular physiology, have a strong record of publication and research grant acquisition, extensive experience teaching physiology at University level, and be an experienced supervisor of research students.

Remuneration: A\$51,692 to A\$59,605 per annum

Information package: Personnel Officer, Office of Human Resource Management, Gold Coast Campus +61 7 5594 8624.

Further information after receipt of the information package: Associate Professor Roger Willis, Faculty of Nursing and Health Sciences telephone +61 7 5594 8906.

Applications close 12 January 1996.

AN EQUAL OPPORTUNITY EMPLOYER

GRIFFITH UNIVERSITY
PREPARING YOU FOR A BETTER FUTURE

QUEENSLAND • AUSTRALIA



**FACULTY POSITIONS AT THE
UNIVERSITY OF MASSACHUSETTS
AMHERST**

The Biology Department of the University of Massachusetts, Amherst is committed to developing strong programs in the areas of plant biology, and organismic and evolutionary biology, and is announcing the following full-time tenure-track positions:

PLANT/CELL/DEVELOPMENTAL BIOLOGY

We seek an outstanding, innovative scientist with evidence of high productivity and the ability to establish a vigorous, extramurally supported research program directed toward answering fundamental questions in plant cell/developmental biology. The candidate is expected to teach in the Biology undergraduate program and participate in graduate training.

VERTEBRATE MORPHOLOGY/SYSTEMATICS/EVOLUTION

Preference will be given to outstanding interdisciplinary candidates employing developmental, functional or molecular approaches. Development of a vigorous, extramurally funded research program is essential, and participation in graduate training through the Organismic and Evolutionary Biology Graduate Program is expected. The candidate is expected to teach comparative anatomy or mammalogy, and a graduate seminar in evolution/systematics. The successful candidate will join a strong interdepartmental research group of biologists with diverse interests and expertise. Commitment to the maintenance and growth of our vertebrate collections is encouraged.

Please submit curriculum vitae, a statement concerning future research plans and teaching interests, and arrange for three letters of reference to be sent to:

Plant Biology Search - Dr. Peter Hepler, Chair
Plant Biology Search Committee, Biology Department
University of Massachusetts, Amherst, MA 01003-5810.
Questions may be sent to plantsearch@bio.umass.edu.
Vertebrate Morphology Search - Dr. William E. Bemis, Chair
Vertebrate Morphology Search, Department of Biology
University of Massachusetts, Amherst, MA 01003-5810.
Questions may be sent to vertsearch@bio.umass.edu

Review of applications will begin on February 1, 1996, and continue until the positions are filled.

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

**TENURE-TRACK
JUNIOR FACULTY POSITION
PROSTATE CANCER**

The University of Southern California/Norris Comprehensive Cancer Center is recruiting a tenure-track, junior faculty member in the Department of Urology with a joint appointment in a basic science department within the USC School of Medicine. We are looking for individuals at the **ASSISTANT** or **ASSOCIATE PROFESSOR** levels with training in the fields of cell and/or molecular biology and interests in the area of prostate cancer research. The individual will develop a vigorous independently funded research program within newly constructed space devoted to prostate cancer research in the Topping Tower addition to the Cancer Center. There will be ample opportunity to interact with other scientists and clinicians in the Gene Expression, Tumor Biology and Genitourinary Cancer Programs within the Center. Start-up funds and interim support will be generous.

Send curriculum vitae, names of three references and summary of research interests to: **Dr. Peter A. Jones, USC/Norris Comprehensive Cancer Center, 1441 Eastlake Avenue, #815, Los Angeles, CA 90033. USC is an Affirmative Action/Equal Opportunity Employer.**

**NATIONAL CANCER INSTITUTE (NCI)
National Institutes of Health (NIH)
Department of Health and Human Services (DHHS)**

**DIRECTOR
DIVISION OF CLINICAL SCIENCES
Medical Officer (General), GS-602-15**

The NCI recently announced that it was accepting applications for the position of Director, Division of Clinical Sciences (DCS), located on the NIH campus in Bethesda, MD. The NCI has extended the date for receipt of applications from December 18, 1995 to January 16, 1996. Individuals who applied previously will be considered and do not need to reapply. The Director, DCS, provides scientific leadership for the NCI intramural clinical research program. He/She is responsible for the development and administration of innovative investigator-initiated clinical research in cancer, AIDS, and AIDS-related malignancies which translates fundamental research to the bedside in a bi-directional manner. Through the allocation of budgetary and FTE resources within the Division, the Director determines immediate and long-range research objectives and plans and directs the implementation of these objectives. The Director is responsible for managing and maintaining a clinical and laboratory environment conducive to development and conduct of clinical research and ensuring that research conducted throughout the NCI intramural program reflects both the highest standards of scientific excellence and the highest ethical standards for protection of the human subjects participating in intramural clinical research. We are seeking physicians who have expertise in the development of innovative programs for the treatment of cancer and AIDS and who have demonstrated the ability to manage large, multi-disciplinary clinical research programs. Experience and working knowledge with the issues related to human subjects experimentation are highly desirable.

SALARY AND BENEFITS: The Director, DCS position is in the Federal Civil Service. Specific salary range information is available from the contact listed below. Total annual compensation is based on **A)** the length of service the physician has with the Public Health Service, Indian Health Service, or Veterans Health Administration; **B)** board certification; **C)** medical subspecialty; and **D)** possession of other exceptional qualifications. A one-time, lump-sum recruitment bonus of up to 25% of basic salary may also be paid. In addition, future compensation may also include an annual retention allowance. Benefits include health and life insurance options, retirement, paid holidays, and vacation and sick leave.

Payment of travel and transportation expenses will be considered on an individual basis.

FOR QUALIFICATION REQUIREMENTS, APPLICATION PROCEDURES, AND OTHER ADDITIONAL INFORMATION, PLEASE CONTACT:

**Ms. Laura Faile
Personnel Management Specialist, NCI
NCI Personnel Office
9000 Rockville Pike
Bldg. 31, Room 3A21
Bethesda, MD 20892
Tel: (301) 496-6503
Fax: (301) 496-6168**



Applications must be postmarked no later than the announcement closing date of 01/16/96. To be considered, applicants must be U.S. citizens.

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

NIH is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL OR STAFF RESEARCHER EXPERIMENTAL CHEMICAL PHYSICS

Experimental quantum control of chemical dynamics with femtosecond lasers. Close interaction among experimentalists and analytical and numerical theorists. Looking for exceptionally able experimentalist; strong laser background desirable. Salary: from \$27,420 (Postdoctoral), from \$43,800 (Researcher, with exceptional experience). For description of current group activities and personnel see World Wide Web site, <http://www-wilson.ucsd.edu> or Email: wilsjob@ucsd.edu. Please send curriculum vitae, statement of research interests and goals, and one letter of recommendation to: Prof. Kent R. Wilson, Department of Chemistry 0339, University of California, San Diego, La Jolla, CA 92093-0339. Affirmative Action/Equal Opportunity Employer.

ASSOCIATE RESEARCH SCIENTIST to study the control of development by homeotic proteins in *Drosophila*. A Ph.D. and two years of experience with *Drosophila* genetics are essential. The project requires a strong background in molecular biology and yeast genetics, and an interest in the regulation of transcription by phosphorylation. *U.S. citizenship/permanent residency required*. Send curriculum vitae and three references to: Dr. Richard Mann, Department of Biochemistry, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Will conduct research on the relationship between sepsis, thyroid hormone, lung cellular, biochemical, and functional integrity in isolated perfused organ and cell system. Successful applicant will have techniques in molecular biology to define alterations in key regulatory pathways involved in surfactant phospholipid and apoprotein synthesis as well as macromolecular changes in type II cellular function. Although the applicant must be able to work independently, the position is designed within a framework of collaborators in pulmonary medicine, pharmacology, and the Center for Molecular Biology and Genetics. Starting salary \$25,000, negotiable commensurate with experience. Send curriculum vitae and three references to: Scott A. Dulchavsky, M.D., Department of Surgery, Wayne State University, 3990 John R Street, Detroit, MI 48201. Wayne State University is an Affirmative Action/Equal Opportunity Employer.

CATO POSTDOCTORAL FELLOWSHIPS

Hollings Cancer Center—available immediately. 1) Molecular biologist to carry out studies on prostate cancer gene therapy in mouse prostate cancer models (contact James Norris). 2) Biochemical pharmacologist or molecular biologist to carry out studies on DNA methylation and antitumor drug response. Experience in cell culture and animal model systems required (contact David Priest). Please send curriculum vitae and names of three references to: James S. Norris, Ph.D., Department of Medicine (CSB912), Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425 or David Priest, Ph.D., Department of Biochemistry, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. Medical University of South Carolina is an Equal Opportunity Employer.

A POSTDOCTORAL POSITION is immediately available in the Vascular Biology Department at the Scripps Research Institute to study the intracellular signaling mechanisms mediated by the integrin family of adhesion receptors. These studies will focus on the identification, isolation, and functional characterization of integrin-associated proteins. The successful candidate should have a Ph.D. in biochemistry or cell biology. Prior experience in molecular biology is desired. Send curriculum vitae and names of three references to: Timothy O'Toole, Ph.D., Department of Vascular Biology V22, Scripps Research Institute, LaJolla, CA 92037. Email: otoole@scripps.edu.

UNIVERSITY OF AUCKLAND NEW ZEALAND

POSTDOCTORAL POSITIONS are available to study 1) the function of bone morphogenetic proteins in zebrafish and 2) signal transduction in a new subfamily of receptor tyrosine kinases. Applicants with backgrounds in developmental biology or molecular biology and signaling are required. Send curriculum vitae and names of three referees to: Dr. Phil Crosier, Department of Molecular Medicine, School of Medicine, University of Auckland, Private Bag 92019, Auckland, New Zealand. FAX: 64-9-373-7010; Email: ps.crosier@auckland.ac.nz. Closing date January 29, 1996.

POSITIONS OPEN

POSTDOCTORAL POSITION KIDNEY BIOLOGY AND PATHOBIOLOGY Case Western Reserve University

Applications are invited for positions funded by NIH Institutional Training Grant, beginning in July 1996. **TRAINING FACULTY** will use both cell and molecular biological techniques to understand normal kidney function and mechanisms of kidney disease. Faculty research interests include mechanisms of inflammatory tissue injury, analysis of transcriptional regulation, control of protein trafficking, kidney development, mucosal immunity and gene transfer techniques. Experience in molecular biology, cell biology or biochemistry is desirable. *Must be permanent resident*. Send letter of application, curriculum vitae, and letters of recommendation to: Dr. John R. Sedor, Chief, Division of Nephrology, MetroHealth Medical Center, Rammelcamp Center for Research, 2500 MetroHealth Place, Cleveland, OH 44109-1998.

POSTDOCTORAL POSITION available immediately for a Ph.D. to investigate the molecular biology of tumor suppression by the protein p53. The candidate should be interested in areas of protein structure-function, protein nucleic acid interactions, control of gene expression and cell-cycle regulation. A strong background in biochemistry, molecular biology, and tissue culture is required. Please send curriculum vitae, statement of research experience, and three letters of recommendation to: Dr. Jill Bargonetti, Hunter College, Department of Biological Sciences, 695 Park Avenue, Room 927N, New York, NY 10021. FAX: 212-772-5227. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

UNIVERSITY OF WISCONSIN-MADISON NATURAL PRODUCTS CHEMIST

POSTDOCTORAL POSITION to isolate, purify, and identify the compound(s) in compost extract responsible for inhibition of germination of fungal plant pathogens. Available immediately. Ph.D. with strong background in chemistry required; experience in microbiology desirable. Send curriculum vitae including statement of research interests and the names of four references to: Dr. John Andrews, Plant Pathology Department, 1630 Linden Drive, University of Wisconsin, Madison, WI 53706. FAX: 608-263-2626.

COMPUTATIONAL MOLECULAR BIOLOGY

A POSTDOCTORAL POSITION working with an interdisciplinary team on the identification of subtle signals in non-coding DNA is available. A strong background in molecular biology, genetics, or a related field and at least one year of experience using computational molecular biology software are required for this position from Health Research Incorporated, a not-for-profit corporation. Contact: Dr. Chip Lawrence, Wadsworth Center, Albany, NY 12201. Email: chip.lawrence@wadsworth.org. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in the Department of Experimental and Clinical Therapeutics at the Barbara Ann Karmanos Cancer Institute at Wayne State University to study molecular mechanisms of antitumor drug resistance in pediatric cancers. Candidates should have a Ph.D. with strong background in molecular biology and biochemistry. Send curriculum vitae, statement of research accomplishments, and names of three references to: Dr. Larry H. Matherly, Karmanos Cancer Institute, 110 East Warren Avenue, Detroit, MI 48201. Equal Opportunity/Affirmative Action Employer/Minorities/Females/Handicapped/Veterans.

POSTDOCTORAL POSITION MOLECULAR DEVELOPMENTAL BIOLOGY

A position is available to study the regulation and function of transcription factors during development (e.g., *Science*, 270, December 22, 1995). Experience in either embryo manipulation, transgenic mouse production, or molecular biology is essential. Send curriculum vitae and names of three references to: Dr. Peter Cserjesi, Department of Anatomy and Cell Biology, Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS BIOCHEMISTRY/MOLECULAR BIOLOGY

The University of Michigan, Department of Dermatology, is seeking highly motivated, creative scientists to fill several **POSTDOCTORAL** positions. Preference will be given to candidates who can join us prior to June 30, 1996. Applicants should possess a Ph.D. with expertise in biochemistry and/or molecular biology, with demonstrated research excellence and strong written and oral communication skills.

Positions are available immediately to investigate molecular mechanisms through which ultraviolet irradiation activates transcription factors and protein kinases and induces metalloproteinases in human skin. Mechanisms through which steroid and retinoid nuclear receptors antagonize responses of human skin to ultraviolet irradiation will also be investigated (see Fisher *et al.*, *Nature*, in press).

Send curriculum vitae to: Dr. Gary J. Fisher, Department of Dermatology, University of Michigan, 1301 East Catherine, Kresge I, R6558, Ann Arbor, MI 48109-0528. FAX: 313-747-0076; Email: cmhill@umich.edu.

The University of Michigan is a non-discriminatory, Affirmative Action Employer.

POSTDOCTORAL POSITIONS

POSTDOCTORAL POSITIONS at The Center for Blood Research and Harvard Medical School. Applicants should have experience in immunology and molecular genetics. Projects are concerned with (1) the human immune response, its control by major histocompatibility complex, T cell receptor and other genes; (2) mechanisms by which major histocompatibility and other genes cause IgA deficiency in humans; and (3) mechanisms by which major histocompatibility genes cause autoimmune disease. Send curriculum vitae, covering letter, and the names of three persons who can write letters of reference to: Dr. Chester A. Alper, The Center for Blood Research, 800 Huntington Avenue, Boston, MA 02115. An Equal Opportunity Employer.

POSTDOCTORAL/MOLECULAR BIOLOGY AND GENETICS UNIVERSITY OF COLORADO AT BOULDER

Postdoctoral **RESEARCH ASSOCIATE** positions are available to study either of the following two subjects: (1) Genetic and molecular analysis of factors involved in Ras-mediated signal transduction controlling cell differentiation and factors controlling cell migration in the nematode *C. elegans*. (2) Cloning and analyzing human macular degeneration genes (Co-PI by Dr. Kang Zhang). Interested candidates with strong genetics or molecular biology training should send a curriculum vitae, copies of publications, and at least two references to: Dr. Min Han, Department of Molecular, Cellular, and Developmental Biology, University of Colorado, Boulder, CO 80309-0347. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in molecular biology of nuclear hormone receptors, primarily studying mechanisms of gene regulation by thyroid hormone, retinoid and vitamin D receptors. Experience in molecular biology is required. Send curriculum vitae and letters of reference to: Dr. Ron Koenig, University of Michigan Medical Center, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0678. FAX: 313-936-6684. Equal Opportunity/Affirmative Action Employer.

Two **POSTDOCTORAL POSITIONS** available: (1) neuroanatomy of basal forebrain, (2) recording neurons in behaving animals. Excellent salary and benefits. Work among interactive group of systems/behavioral neuroscientists. Send curriculum vitae with names of three references to: Gary Aston-Jones, Ph.D., Director, Division of Behavioral Neurobiology, Department of Psychiatry, M.S. 403, Hahnemann University, Broad and Vine, Philadelphia, PA 19102.

POSTDOCTORAL FELLOW or RESEARCH ASSOCIATE position is available to study the role of the copper protein ceruloplasmin in oxidative processes in vascular disease. Expertise in molecular methods essential; experience using transgenic animals a plus. Send curriculum vitae and the names of two references to: Paul L. Fox, Ph.D., Department of Cell Biology, Cleveland Clinic Research Institute, Room NC10, 9500 Euclid Avenue, Cleveland, OH 44195.

Postdoctoral Fellows

Molecular & Cell Biology

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, invites applications for post-doctoral Fellow positions in the general area of molecular and cell biology of blood group antigens.

The fellows will participate in a collaborative, NIH-funded, SCOR program on Transfusion Biology and Medicine aimed at understanding the molecular basis of human blood groups in order to enhance the capabilities of blood banking services, characterize structure/function relationships and explore relations in disease processes. Candidates must offer a Ph.D. or MD degree supported by a strong background in biochemistry and molecular biology, including experience in gene isolation and expression and recombinant technology.

The program project leaders include:

CHENG-HAN HUANG, MD, PH.D.

Molecular genetics of the red cell Rh antigens

COLVIN M. REDMAN, PH.D.

The Kell blood group system and the McLeod phenotype

A. OSCAR POGO, MD

The Duffy blood group protein

MARION E. REID, PH.D.

Molecular biology in clinical immunohematology

These positions will be available January, 1996 and command a competitive salary and excellent comprehensive benefits package. The Lindsley F. Kimball Research Institute comprises 17 laboratories carrying out autonomous research programs in diverse field of biomedical research. Interested candidates should send C.V. and the names of (3) references to: Colvin M. Redman, Ph.D., The New York Blood Center, 310 East 67th Street, New York, NY 10021. An Equal Opportunity Employer M/F/D/V.

Lindsley F. Kimball

Research Institute

A Division of the New York Blood Center

METABOLISM AND STRUCTURAL BIOLOGY RESEARCH PROGRAM SCIENTIFIC PROGRAM MANAGER NIH RESEARCH ADMINISTRATION

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) seeks a scientist (Ph.D. or equivalent) to serve as Director, Metabolism and Structural Biology Research Program. The successful candidate will have independent research experience, excellent interpersonal and written communications skills, and the ability to identify research priorities and opportunities. The position involves scientific administration of grants and contracts, program planning and development, close interaction with leading researchers, and the opportunity to organize and/or attend scientific meetings. The position (GS-13/14) is available in early 1996 at a salary range of \$52,867 to \$81,217 per annum depending on qualifications.

A position description which delineates the areas of science encompassed by the program and qualifications for the position are available from Ms. Valencia Blue in the Office of Human Resource Management, NIDDK. The deadline for applications is February 28, 1996. Submit a CV, bibliography, application background survey (optional) and supplemental qualifications statement to:

Mr. Ronald Sleyo
Office of Human Resource
Management
NIDDK, NIH
Building 31, Rm. 9A34
31 CENTER DR MSC 2560
BETHESDA MD 20892-2560
Email: sleyor@nidk.nih.gov



U.S. Citizenship is Required / NIH is an Equal Opportunity Employer
Minority and Women Applicants are Encouraged to Apply

Postdoctoral Positions

Postdoctoral Positions are available to work on biophysical studies of proteins involved in vesicle budding and fusion neurons and in yeast. Particular emphasis is on using X-ray crystallography for soluble domains but other biochemical and biophysical techniques will also be pursued including solution nuclear magnetic resonance spectroscopy. Our goal is to gain insights about how protein-protein interactions contribute to the specificity of vesicle-to-membrane targeting. The laboratory is well-equipped for cloning, protein expression, purification, crystallization, and data analysis. State-of-the-art shared instrument facilities are available for X-ray data collection, solution NMR, CD, FTIR, and computation. In related research computational methods are being developed for transmembrane-domain structure prediction. Candidates should have extensive experience in protein biochemistry and molecular biology. Candidates will be trained in X-ray crystallographic techniques if necessary.

Interested candidates should send a C.V. and have three letters of reference forwarded to:

Professor Axel T. Brunger
Yale University
266 Whitney Avenue
New Haven, CT 06520-8114
FAX: (203) 432-6946

EOE

FACULTY POSITION IN MICROBIOLOGY MICHIGAN STATE UNIVERSITY and EDITOR-IN-CHIEF BERGEY'S MANUAL

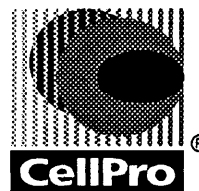
The Department of Microbiology at Michigan State University working jointly with the Board of Trustees of the Bergey's Manual Trust intends to make an academic year appointment at the level of **ASSOCIATE OR FULL PROFESSOR** (with tenure), which would also carry the title and responsibilities of **EDITOR-IN-CHIEF** for the Bergey's Manual Trust. In addition, the successful applicant will also be associated with the MSU-National Science Foundation Center for Microbial Ecology. Applicants are sought with expertise in microbial systematics and/or biodiversity. Responsibilities include supervising the publications activities of the Bergey's Manual Trust, attracting external support for research in the general area of microbial systematics and diversity, and teaching duties at the undergraduate and/or graduate level. A Ph.D. degree and demonstrated success and visibility in microbiology are required, along with the ability to work with the contributors to and publishers of Bergey's Manuals and associated publications. The Department of Microbiology at MSU is one of the largest and most diverse such departments in the nation. To apply, send a C.V. along with a plan describing future goals in research and in the role of Editor-in-Chief to: Dr. John Holt, Search Committee, Department of Microbiology, Giltner Hall, Michigan State University, East Lansing, MI 48824. Review of applications will begin March 1, 1995. *Michigan State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are particularly encouraged to apply.*

Postdoctoral Fellow

As a part of our program in adoptive immunotherapy, we have an opening for a post-doctoral scientist with knowledge of antigen-presenting cells. Responsibilities include developing antibody-based methods for enrichment of human dendritic cells and optimizing conditions for their expansion. This work will also include the priming of dendritic cells with peptide and protein antigens for use in-vivo as tumor vaccines and ex-vivo for the generation for antigen-specific T cells.

The successful candidate will have a Ph.D. in Immunology or Cell biology with 1-3 years of experience.

Please send your resume to:
Human Resources, CellPro, Inc.,
22215 26th Ave. SE, Bothell, WA
98021-8446 or fax (206) 485-4787



**Wanted: Committed, ambitious
scientist. Must be a team player
with a vision for the future.
Ph.D., M.S. or B.S. degree necessary.**

Does this describe you?

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies and institutions. You can also attend the seminar, *How to get a paper published in SCIENCE*. This exclusive seminar is offered free of charge and will be conducted by one of SCIENCE's editors.

1996 bioSCIENCE Career Fairs

Cambridge, MA on the MIT Campus in Cambridge

March 1: 11 am - 4 pm; March 1 Seminar: 11 am - 11:30 am

March 2: 12 pm - 4 pm

San Francisco, CA on the Stanford Campus in Palo Alto, May 3-4

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

**bioSCIENCE
CAREER FAIRS**

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

bioSCIENCE Career Fair Information On-line: <http://www.aaas.org>
(Choose SCIENCE Global Career Network from the menu)

THE UNIVERSITY OF TEXAS AT AUSTIN

invites nominations and applications
for the position of

DEAN OF THE COLLEGE OF ENGINEERING

The University of Texas at Austin is the oldest and largest of The University of Texas System's 15 component institutions. It has a main campus of 357 acres and 110 buildings, 48,500 students, 2,300 faculty members and a staff of more than 10,000. Austin is located on the Colorado River at the Eastern edge of the beautiful Texas Hill Country, and boasts a pleasant, mild climate, a diverse culture, and an economy based primarily on state government, The University, and a number of high technology industries.

The College of Engineering is one of the 14 colleges and schools that comprise The University, with approximately 241 tenured and tenure-track faculty, 547 full-time and 1600 part-time staff, 440 undergraduate and 1900 graduate students. The expenditures in 1994-95 were \$94 million. The College has seven undergraduate and 14 graduate programs. A 1995 national survey of US engineering schools ranked the College as the eighth overall in the nation. Measured against public institutions, it ranked third.

The Dean is the chief executive officer of the College and is expected to provide vision and leadership as well as to administer the varied academic and research programs in the College, to manage the budget, and to engage in fund raising in the private sector. The Dean reports to the President of The University.

We are looking for a congenial, dynamic leader with demonstrated outstanding abilities in research, teaching, administration, service to the community, and communication with the private sector, the students, the faculty and the engineering profession. The candidate must qualify for appointment to the rank of Professor with tenure in a department of the College.

Applications and nominations will be accepted until February 22, 1996; after this date the Committee may request and consider credentials from candidates nominated by responsible sources. Nominations and applications should be accompanied by a letter discussing relevant experience and accomplishments, a curriculum vitae, and the names of four references. These materials should be sent to:

Professor R.C. Loehr, Chairman
Consultative Committee for the Selection of the Dean of Engineering
Department of Civil Engineering
ECJ 9.102B
The University of Texas at Austin
Austin, Texas 78712

The University of Texas at Austin is an affirmative action, equal opportunity employer.

FACULTY POSITIONS

UNIVERSITY OF FLORIDA

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

Three tenure track positions are available in the Department of Materials Science and Engineering for persons with expertise and a strong academic record in the areas listed below. The faculty members are expected to teach graduate and undergraduate courses, initiate and sustain strong sponsored research programs. Potential faculty members with strong interests in manufacturing and industrial interactions are especially encouraged to apply. A doctoral degree is required.

A: Ceramics -- Structure - property relationships in ceramics and glass.

B: Metals -- Processing, corrosion, or process metallurgy.

C: Polymers -- Synthesis, processing and properties for engineering and/or biomedical applications.

The MSE Department at UF is one of the nation's leading departments in the field and has 30 faculty, around 200 graduate students, 100 upper division undergraduates, and \$10M in annual research expenditure. The Department provides integrated materials science and engineering education, as well as multidisciplinary research programs devoted to biomaterials, ceramics, composites, electronic materials, metals, and polymers. The Department also houses The Advanced Materials Research Center, Biomedical Engineering Center and the Major Analytical Instrumentation Center. The latter user-supported center provides direct analysis, coordinated research and training to scientists from UF, as well as those from industries and other Universities. In addition, the Department actively participates in the multidisciplinary Microfabritech program, and the National High Magnetic Field Laboratory.

The positions are offered primarily at the assistant professor level. However, exceptional candidates may be considered at the associate or full professorial levels. The deadline for applications is March 31, 1996. Applicants should submit a curriculum vitae, statement of research and teaching plans in one of the areas and names of three references to:

Chair of the Search Committee
Department of Material Science and Engineering
University of Florida
132 Rhines Hall, P.O. Box 116400
Gainesville, FL 32611-6400

The University of Florida is an affirmative action/equal opportunity employer.

Diversity Conference '95 Highlights

Don't miss the 26 January 1996 issue of *SCIENCE*, where we will highlight our 1995 conference: *Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries*.

This special advertising supplement will feature interviews with key speakers from the conference and will examine diversity programs at leading pharmaceutical companies.

The results of an industry-wide survey on diversity programs will also be explored.

This special advertising supplement is the perfect place to showcase career opportunities at your company and to reaffirm your company's commitment to diversity.

Other benefits include:

- ◆ Bonus Distribution to scientific minority organizations.
- ◆ Placement at no charge on SCIENCE Global Career Network. <http://www.aaas.org>

Issue date: 26 January

Reservation deadline: 9 January

Please contact Janis Crowley at
phone: 212-496-7704
fax: 202-682-0816

SCIENCE

RESEARCH AUTOMATION SCIENTIST

Laboratory Automation

Merck Research Laboratories in Rahway, New Jersey, a world leader in biological and pharmaceutical research, has an immediate opening for a Research Automation Scientist.

The successful candidate will be responsible for implementing high throughput laboratory assay systems within Basic Research. You will need to automate a variety of enzyme, receptor and cell-based assays. Responsibilities will include working as a key member of a team to not only develop and implement the assays, but also to collect, analyze and load the data into central databases.

A Ph.D. or M.S. in a biological or chemical science with 2 or more years experience with laboratory automation and robotics is required. Experience with setting up biological screens and instrumentation is a must, while a background that includes computer programming is a plus. You should be strongly motivated and able to work independently as well as in a team environment.

Merck offers a competitive salary, an excellent benefits package, opportunities for professional growth and pleasant working conditions at our Rahway, NJ facility. Please send curriculum vitae with cover letter to **Manager, Human Resources, AD #170, Merck Research Laboratories, P.O. Box 2000, RY80-A3, Rahway, NJ 07065.** EEO/AA/VH/Employer.



MERCK
Research Laboratories

POSITIONS IN SILVICULTURE

Department of Forest Sciences
The University of British Columbia

The silviculture group in the Forest Sciences Department has expertise in forest ecology, tree physiology, forest genetics dendrology, and silviculture practices and their linkage to forest management planning.

Over the next three to five years we anticipate filling at least three positions in the areas of regeneration silviculture, stand tending, dendrology and tree growth and development. These faculty will collectively include expertise and field experience in applied ecology, methods of stand-level manipulations and silviculture systems. They will be expected to teach undergraduates, supervise graduate students and conduct research. Research areas include: the application of ecological and biological diversity principles across a range of ecosystems and landscapes; the effects of forest and stand dynamics on potential values and uses of forests; determination of silvicultural effects on social, economic and legal issues; and the application of tree physiology and silvics.

The Faculty seeks to fill the first of these positions in the next 6-8 months. The position is available on **July 1, 1996** and is subject to final budgetary approval.

The immediate vacancy is for a tenure track Assistant Professor with an initial responsibility in part to teach regeneration silviculture including silvicultural systems. Teaching responsibilities may evolve as additional appointments are made.

The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities. This position is available at a higher level for particularly well qualified candidates from the equity groups. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Please direct inquiries, and applications consisting of a Curriculum Vitae, the names of three references, and a brief outline of expertise and research interests, **prior to February 15, 1996** to:



Dr. G.F. Weetman
Department of Forest Sciences
University of British Columbia
270, 2357 Main Mall
Vancouver, B.C. CANADA V6T 1Z4
Tel: (604) 822-2504 Fax: (604) 822-9102
E-mail: gweetman@unixg.ubc.ca

SYMPOSIUM



The University of Pennsylvania
Departments of Chemistry and Pharmacology



proudly presents

Enzyme Symposium II: Recent Advances in Mechanism and Structure and Their Implications for Drug Design

March 14, 1996, Austrian Auditorium, Clinical Research Building

Enzymology of Steroid Synthesis and Transformation

Cynthia Stauffacher, Purdue Univ.
Patrick Casey, Duke Univ.
Trevor Penning, Univ. of Pennsylvania

Kinase Inhibitors and Phosphoryl Transferase

Philip Cole, Harvard Medical School
Sung-Hou Kim, Univ. of CA at Berkeley
Albert Mildvan, The Johns Hopkins Univ.

Enzymes with Tyrosyl Radicals

Barry Cooperman, Univ. of Pennsylvania
Joanne Stubbe, M.I.T.
Patrick Loll, Univ. of Pennsylvania
Brian Dunford, Univ. of Alberta

Carbonic Anhydrases

David Christianson, Univ. of Pennsylvania
David Silverman, Univ. of Florida
John Baldwin, Pharmacopeia, Princeton

Registration Information: Graduate Students: \$10.00; Faculty Members: \$50.00; Scientists from Profit Organizations: \$100.00. Checks must be received by Friday, February 23, 1996. On-site registration will be available at a higher cost.

Please contact one of the sponsoring departments for a registration form:

Department of Pharmacology
153 Johnson Pavilion
Philadelphia, PA 19104-6084
phone (215) 898-1184; fax (215) 573-9135
<http://www.med.upenn.edu/~pharm/enzyme.html>

Department of Chemistry
350 Chemistry Building
Philadelphia, PA 19104-6323
phone (215) 898-5714; fax (215) 573-2201

Myco Pharmaceuticals, a leader in microbial genetic engineering applied to small molecule drug discovery, has excellent opportunities in its research division. We offer a scientifically rewarding environment and a top-notch research staff in the heart of the Cambridge biotechnology community. Myco seeks candidates with a high level of commitment, diligence, and excellent communication skills.

Director of Microbiology

The candidate will have a record of achievements in an area of molecular microbiology (Ph.D. with significant experience), proven managerial skills and a high interest in drug discovery. As part of the senior management team, they will direct the antibacterial effort and interface with administration, scientific advisors, and other project groups. **Code: DMB**

Scientist

The candidate will have a Ph.D and postdoctoral or industrial experience. Responsibilities include identifying and validating novel antibacterial targets and configuring high-throughput screens. A thorough knowledge of bacterial genetics, bacterial physiology, and biochemistry is expected. **Code: ABT**

Clinical Microbiologist

The candidate will have an advanced degree, experience in clinical microbiology and data management, and the ability to handle microbial pathogens. Responsibilities include bio profiling lead compounds. In-depth knowledge of susceptibility testing and mechanisms of pathogenesis and drug action are essential. **Code: CSM**

Research Associate

The candidate will possess a BS or MS and hands-on experience in biochemical and molecular biological techniques. Experience in assay development, screening, and molecular genetic techniques with bacteria are desirable. **Code: RAC**

Please send your resume to: **Human Resources, Code _____, Myco Pharmaceuticals Inc., One Kendall Square, Building 300, Cambridge, MA 02139; FAX (617) 225-2997.**

MYCO PHARMACEUTICALS INC.

An equal opportunity employer

FACULTY POSITIONS DEPARTMENT OF MEDICINE UNIVERSITY OF VIRGINIA

The Division of Gastroenterology and Hepatology is seeking applicants for two positions (M.D. or Ph.D.) at the rank of Assistant Professor or higher. We seek individuals with significant postdoctoral experience and research interests relevant to mucosal immunology and biology of cytokines and cytokine antagonists using contemporary approaches, including molecular biology, genetic analysis, control of transcription and cell signaling. Qualified candidates should have demonstrated ability to attract or maintain extramural funding. The University of Virginia provides excellent research facilities in an exceptional environment. Centers for research in Immunology, Cancer Biology, Molecular Biology and Cell Signaling, Retrovirus and AIDS and Cardiovascular Physiology are present on campus. Applicants should send a curriculum vitae, a summary of present and future research interests, and two letters of recommendation to **Fabio Cominelli, M.D., Ph.D., Chief, Division of Gastroenterology and Hepatology, Box 145, University of Virginia Health Sciences Center, Charlottesville, VA 22908.**

Post Doctoral Mucosal Immunology/Molecular Biology positions are available to study the role of T-cells and cytokines in intestinal inflammation using molecular biology techniques and transgenic methodology. A background in immunology and molecular biology is desirable. Send Curriculum Vitae and names of three references to **Fabio Cominelli, M.D., Ph.D., Chief, Division of Gastroenterology and Hepatology, Box 145, University of Virginia Health Sciences Center, Charlottesville, VA, 22908.** Telephone: 804-243-6400. Email: FC4Q@virginia.edu.

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

UNIVERSITY OF HAWAII AT HILO FACULTY POSITION

Assistant Professor of Biology, position no. 82111, pay range 13, full-time, nine-month tenure-track, to begin approximately August 1996, pending funding and position clearance. **Duties:** Teach undergraduate courses in biostatistics, evolution, natural history of the Hawaiian islands, general ecology, and labs in general biology for non-majors and labs in botany or zoology depending upon the successful applicant's background; conduct field-oriented research in evolutionary ecology/biology, seek extramural research funding, and publish results; participate in university governance activities including committees, advisory boards, etc. **Minimum Qualifications:** Ph.D. from an accredited college or university in a biological science discipline appropriate to the advertised position, demonstrated expertise in teaching of or use of biostatistics, field oriented research experience in evolutionary ecology/biology. **Desirable Qualifications:** teaching experience at the college or university level, experience in molecular techniques, and publications in evolutionary ecology/biology. **Minimum Annual Salary:** \$32,028

Assistant Professor of Biology, position no. 83424, pay range 13, full-time, nine-month, tenure-track, to begin approximately August 1996, pending funding and position clearance. **Duties:** Teach undergraduate lectures and laboratories in human anatomy and physiology, possibly comparative vertebrate anatomy, and laboratories in zoology and general biology for non-majors; seek extramural research funding, conduct research in the applicant's field of academic expertise, and publish results; participate in university governance activities including committees, advisory boards, etc. **Minimum Qualifications:** Ph.D. from an accredited college or university in a biological science discipline appropriate to the advertised position and teaching experience at the college or university level. **Desirable Qualifications:** Postdoctoral teaching/research experience, publications relevant to the advertised position. **Minimum Annual Salary:** \$32,028.

Applications: Send letter of application, curriculum vitae, and arrange to have official graduate school transcripts and three letters of recommendation sent to Leon E. Hallacher, Biology Department, University of Hawaii at Hilo, 200 W. Kawili St., Hilo, HI 96720-4091. **Closing Date:** Postmarked February 29, 1996.

AN EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER



Chair, Department of Neurology. The University of California, Irvine, College of Medicine seeks candidates for the position of Chair, Department of Neurology. Candidates should be board certified in Neurology, have a solid track record in scholarly activities in clinical and basic scientific research, and have demonstrated abilities in administration. This is a state funded, tenured FTE position. A parallel search is being conducted for the position of Director of Neurosciences at UC Irvine. Send CV and names and addresses of three references to **Dr. R. T. Robertson, Chair of Neurology Search Committee, c/o Janet Nash, College of Medicine, Room 246 Irvine Hall, UC Irvine, Irvine CA 92717-3950.** *UCI is rooted in education: enriched by diversity.*



Fuji ImmunoPharmaceuticals Corp.,
a subsidiary of Fuji Photo Film Co., Ltd.,
is a rapidly growing biotechnology firm
based in Lexington, MA. We are seeking

motivated professionals to join us in the following:

Protein Purification

We are seeking an MS with 3-5 years' experience or a BS with 7 years' experience to purify and characterize recombinant proteins according to GLP and GMP guidelines. Hands-on experience in ion-exchange, gel filtration and affinity chromatography necessary. **Job Code: KL**

Organic Chemistry

Two positions are available: one Ph.D., one MS in Synthetic Organic Chemistry. Experience in Heterocyclic chemistry necessary. **Job Code: MO**

Regulatory Affairs/Product Development Assistant Director

Candidates should have experience in pharmaceutical/biotech product development. Ph.D. in related discipline preferred. Familiarity with one or more aspects of regulatory processes (GLP, GMP and GCP) to support IND's and NDA's required. Strong preference for IND/NDA writing experience. **Job Code: TD**

Please send CV or resume, indicating Job Code, to: **Human Resources, Fuji ImmunoPharmaceuticals Corp., 125 Hartwell Avenue, Lexington, MA 02173.** An Equal Opportunity Employer M/F/D/V.

FIP

Fuji ImmunoPharmaceuticals Corp.

Pacific Northwest National Laboratory

Two senior staff positions are available in molecular biology as part of an expansion in biotechnology at Pacific Northwest National Laboratory. Opportunities exist for collaboration with interdisciplinary programs in structural biology, molecular and cell biology, microbial genomics, physiology and ecology, and bioprocessing. In addition, unique instrumentation for high-field NMR, mass spectrometry, and near-field optical microscopy, as well as other state-of-the-art facilities, are available within the new Environmental Molecular Sciences Laboratory, a national collaborative facility supporting DOE's environmental and energy missions.

Applicants must have a Ph.D. or equivalent and at least 5 years experience beyond the postdoctoral level, and must provide evidence of substantial research accomplishments and the ability to maintain an independent research program in one of the following areas:

- **Environmental molecular microbiology** focused on prokaryotic gene expression, gene identification, or enzymology, as related to bioremediation or extremophiles.
- **Mammalian molecular biology** focused on gene regulation, structure-function relationships of transcription factors, or cell signaling and signal transduction as related to health effects from environmental exposures to chemicals.

For consideration, please reference **ad# 11-2082-026-PLB** on your scannable curriculum vitae; include the names of 3 references and a description of your research interests and plans. By **2/15/96** send to: **Pacific NW National Laboratories, PO Box 999, K1-24, Richland, WA 99352** or e-mail to: **pnl_open_positions.gov** (in ASCII or WP51).

NW Laboratories is an AA/EOE and supports diversity in the workplace. Minorities, Women, Vietnam-era & Disabled Veterans, and the Disabled are encouraged to apply.

WE'RE CHANGING MILLIONS OF LIVES. NOW IT'S YOUR TURN.

At Lederle-Praxis Biologicals, we're pioneering the design, manufacture and marketing of vaccines so sophisticated, they're changing lives—right now.

Here, you'll help improve the quality of a lot of lives. Including your own. Our research facility, located in a suburb of Rochester, NY, is within easy reach of some of New York State's most attractive cultural, educational and recreational resources.

Research Scientist

Protein Purification & Characterization

In this position, you will design and develop purification procedures for native and recombinant proteins in support of a wide range of bacterial vaccine research projects.

To qualify, you must possess a Ph.D. (or equivalent) in Biochemistry and a minimum of 2 years' postdoctoral experience in protein purification and characterization.

At Lederle-Praxis, you'll enjoy a professional atmosphere and the kind of salary and benefits package you'd expect from an industry leader. Please send your resume to: **Human Resources Department, Lederle-Praxis Biologicals, 211 Bailey Rd., West Henrietta, NY 14586-9728.** An Equal Opportunity Employer M/F.



Lederle-Praxis Biologicals
Protecting Families Through Immunization®

Be rewarded for your new ideas

The BFGoodrich Collegiate Inventors Program recognizes university students and their faculty advisors for research and innovative discoveries.

- Open to any full-time student at a U.S. college or university
- Separate judging for both undergraduates & graduates
- Thousands of dollars in cash awards
- Winners are honored alongside inductees of the National Inventors Hall of Fame

For information and an application call:

1-800-968-4332 or access
the World Wide Web site
for Inventure Place at
<http://www.invent.org/>

DEADLINE FOR APPLICATIONS:
June 4th, 1996



National
Inventors Hall of Fame®

*This program is sponsored by
The BFGoodrich Company and
administered by Inventure Place*

The University of California, Irvine invites applications and nominations for the position of **DIRECTOR of the WILLIAM GILLESPIE NEUROSCIENCE RESEARCH FACILITY**, the first component of the Center for the Health Sciences on the UCI campus. The Director will hold a professorial appointment in an appropriate department.

The Gillespie Neuroscience Research Facility is a joint project of the College of Medicine and the School of Biological Sciences which will house collaborative, multidisciplinary investigations that further basic and clinical neuroscience research at UC Irvine. The 79,000 sq. ft. facility is designed to accommodate the research programs of 10 - 14 principal investigators, a large vivarium, and administrative support functions. The facility, currently under construction adjacent to the College of Medicine complex, will be available for occupancy in March 1997.

The Director will be responsible for recruiting 5 new tenure track faculty investigators in areas relevant and complementary to UCI's established areas of excellence in neuroscience research: brain aging, learning and memory, schizophrenia, neuropharmacology, brain imaging, developmental neurobiology, and ion channels. The Director will also be expected to provide campus leadership in the development and coordination of UCI neuroscience research programs, and to identify new initiatives and opportunities for basic and clinical investigation.

Candidates must have 1) M.D. and/or Ph.D. degrees, 2) an active and distinguished research record in a clinical or basic neuroscience discipline, 3) demonstrated administrative/leadership skills, 4) demonstrated excellence in teaching, 5) experience in securing extramural funding, 6) a commitment to the acquisition of new funding for the Facility's interdisciplinary programs, and 7) experience in working with the private sector in developing new research initiatives.

Applicants should submit a letter of interest, a curriculum vitae, and the names and addresses of three professional references to:



Dr. Dennis Cunningham
Chair, Neuroscience Directorate Search
Department of Microbiology & Molecular Genetics
University of California
Irvine, CA 92717.

Nominations should be sent to the same address. Applications will be accepted until an individual has been selected. The University of California is an equal opportunity employer.

Recruitment Advertisers

SAVE 25%

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

For advertising information:

In Europe,

phone +44 (0) 1223 302067,
or fax +44 (0) 1223 576208

In the U.S.,

phone (202) 326-6532,
or fax (202) 682-0816.

In Japan,

phone +81 3 3235-5961,
or fax +81 3 3235-5852

In Australia,

phone +61 02 922 2977,
or fax +61 02 922 1100

SCIENCE

COVERS THE WORLD

SCIENCE ENTERS CYBERSPACE!

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

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

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

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

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

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

SCIENCE

COVERS THE WORLD

Special Advertising Supplement with Career Fair Bonus Distribution

23 February Issue

Careers in Biotechnology and Pharmaceuticals

The 23 February issue of SCIENCE will feature a special advertising supplement on careers in biotechnology and pharmaceuticals.

Plus, this issue will be distributed at the bioSCIENCE Career Fair, 1-2 March, held at the MIT campus in Cambridge, MA.

Advertisers in this issue are eligible to participate in the career fair at a discounted rate!

**Recruitment Advertising Space Reservation Deadline:
6 February 1996**

To Advertise, Contact:

In the U.S., Janis Crowley

Phone: (212) 496-7704; Fax: (202) 682-0816.

In Europe, Debbie Cummings

Phone: (44) 01223 302067; Fax: (44) 01223 302068.

SCIENCE

Give your career the backing of a billion dollar leader.

For over a century, Searle has defined the spirit of innovation in the pharmaceutical field. Behind our firm commitment to both customers and employees stands one of the health care industry's most respected names. Now, as our remarkable growth and success continue, you could join us as a Research Biologist.

RESEARCH BIOLOGIST

You will provide state-of-the-art DNA sequencing support to a wide variety of drug discovery projects using an ABI 373 automated DNA sequencer. You will also establish and maintain a scheduling system to ensure timely turnaround of samples, and work with researchers to trouble shoot DNA sequencing problems. Additionally, you will ensure that new approaches for sample prep and modifications to sequencing reactions are evaluated.

We require a BS/BA in Biology or related field and 2-3 years of experience in molecular biology, including DNA sequencing. We prefer experience with automated DNA sequencing and ABI machines. Excellent communication, interpersonal and Macintosh skills are a must.

In return for your expertise, Searle offers an excellent salary and benefits package. For consideration, please send your resume to: Sherrie Thompson, Searle R&D c/o Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO 63198, Attn: DNA Sequencing/EB3D. An equal opportunity employer M/F/D/V.

SEARLE

FACULTY POSITION

The Schepens Eye Research Institute Harvard Medical School

The Schepens Eye Research Institute, an affiliate of Harvard Medical School, seeks well-qualified (M.D., M.D./Ph.D., or Ph.D.) applicants for a position at the Associate Professor level to develop a basic research program in molecular biology of multifactorial retinal diseases (diabetic retinopathy, age-related macular degeneration). Resources and newly renovated laboratory space for initiation of this program have been provided by a generous grant from the Lucille P. Markey Charitable Trust, as well as private philanthropy. Candidates should have experience at the faculty level in creating, sustaining and supporting an independent research program. The successful candidate should have experience in one or more of the following areas: transcription factors and molecular control of gene function; signaling pathways among plasma membrane, cytosol, and nucleus as they relate to growth factors, neuropeptides, cytokines, their receptors and respective inhibitors; regulation of neovascularization, including both angiogenesis and angiostasis; extracellular and intracellular factors involved in causing apoptosis. Candidates are expected to establish their own independent research programs and to develop substantive collaborations with Institute scientists currently working on retinal pathobiology, to be active in training of pre- and postdoctoral fellows, and to participate as member of the Harvard Medical School faculty.

Applicants should send their curriculum vitae, a statement of research interests, and the names of three references by March 31, 1996 to:

J. Wayne Streilein, M.D.

President, and De Walt and Marie Ankeny Director of Research
Professor of Ophthalmology and Dermatology
Harvard Medical School
20 Staniford Street
Boston, MA 02114

SERI and Harvard Medical School are
Equal Opportunity/Affirmative Action employers.
Women and minorities are encouraged to apply.

POSTDOCTORAL RESEARCH OPPORTUNITIES

Boehringer

Ingelheim Pharmaceuticals

Inc., is seeking outstanding Scientists

to conduct biomedical research in a pharmaceutical R&D environment. Explore the opportunities for postdoctoral research in surroundings where creativity and innovation drive the search for novel drug therapies targeting critical human diseases with unmet therapeutic needs.

Four postdoctoral positions are available beginning January/February, 1996 in the Department of Immunological Diseases. Candidates must hold a Ph.D. in the Biological Sciences. They should also possess highly developed analytical skills in addition to excellent oral and written communication skills.

Somatic Mutation and Antigen-Dependent Clonal Selection

Postdoctoral position available to examine somatic mutation in normal B lymphocyte clones and study antigen-dependent clonal selection *in vitro*. Experience in molecular biology and cellular immunology preferred. Respond: JP-PD1

Cyclins and Cyclin-Dependent Kinases

Postdoctoral position available to biochemically characterize the role of cyclins and cyclin-dependent kinases in regulating cell cycle progression in B and T cells. Experience with basic biochemical methods and gene expression technologies required. Respond: JP-PD2

Ion Channels

Postdoctoral position to study ionic events associated with signaling via adhesion molecules in both leukocytes and endothelial cells. Experience with patch-clamp techniques and/or the use of fluorescent dyes to measure intracellular ion activities is required. Respond: JP-PD3

T Cell Activation

Post doctoral position available to investigate the roles of protein tyrosine kinases and SH2 domain-protein interactions in T cell signalling in cell lines and primary cell models. Experience in immunology, cell biology, or biochemistry of signal transduction pathways desired. Respond: JP-PD4

Boehringer Ingelheim's R&D facility is located in a campus-like setting in a beautiful area of Western Connecticut. We offer excellent facilities and a supportive and challenging environment. For an opportunity to contribute to our innovative programs, please send your curriculum vitae, a brief description of research experience, and the names, addresses, and telephone numbers of three references to: **Boehringer Ingelheim Pharmaceuticals, Inc., JP-_____, 900 Ridgebury Road, P.O. Box 368, Ridgefield, Connecticut 06877-0368.** We are an equal opportunity employer. As a progressive health care company, we have a non-smoking environment.



Boehringer Ingelheim

POSITIONS OPEN

POSTDOCTORAL POSITION IMMUNOBIOLOGY AND CANCER RESEARCH

POSTDOCTORAL POSITION to study bone marrow stromal cell development and differentiation in an insertional mutation transgenic mouse model with altered osteogenesis, identifying the altered gene and analyzing its function in normal bone marrow stromal cells and osteogenesis. Experience in molecular biology and gene cloning required; experience in mammalian cell culture and/or bone histology preferred. Send letter describing experience, curriculum vitae, and three letters of reference to: **Dr. Nancy Nadon, Immunobiology and Cancer, Oklahoma Medical Research Foundation, 825 N.E. 13th Street, Oklahoma City, OK 73104. Equal Opportunity Affirmative Action Employer.**

POSTDOCTORAL POSITION currently available to study transduction mechanisms, second messenger systems, and ion channel modulation in sensory neurons. Applicant should have a strong background in analysis of voltage- and ligand-gated ion channels using patch clamp electrophysiology. Send curriculum vitae and three references to: **Dr. Jon Levine, Division of Neuroscience, University of California, San Francisco, CA 94143-0452. University of California is an Affirmative Action/Equal Opportunity Employer.**

MOLECULAR PLANT PATHOLOGY GRADUATE RESEARCH ASSISTANTS

Wanted! Students interested in pursuing graduate studies in molecular plant pathology, beginning in the fall of 1996. The Department of Plant Pathology at the University of Kentucky is seeking **GRADUATE ASSISTANTS** interested in conducting molecular research in plant pathology toward the M.S. and/or Ph.D. degrees. Faculty members are internationally renowned for their expertise in molecular aspects of plant-microorganism interactions and pathogenesis. The department possesses state-of-the-art equipment for molecular research, further enhanced by the Macromolecular Structure Analysis Facility and other core facilities on campus. Excellent supporting expertise in molecular biology exists in several of the other academic departments as well as in traditional areas of plant pathology within the department. Applicants selected as Graduate Research Assistants will receive initial stipends of \$15,000 per year. Additional information may be obtained from either: **Dr. Christopher L. Schardl, Director of Graduate Studies, Telephone: 606-257-8758; FAX: 606-323-1961; Email: SCHARDL@POP.UKY.EDU** or **Dr. David A. Smith, Chair, Telephone: 606-257-3901; Email: DASMIT@CA.UKY.EDU** at The Department of Plant Pathology, S-305 Agricultural Science Building-N, University of Kentucky, Lexington, KY 40546-0091, U.S.A. The University of Kentucky is an Equal Opportunity Employer.

RESEARCH AND DEVELOPMENT RUBBER CHEMIST to conduct research to develop new recipes and improve rubber compounds using advanced engineering materials and techniques. Modify present polybutadiene and natural rubber compounds and use new and other polymeric materials and reaction engineering systems for golf ball design. Coordinate design of solid polymers, processing operations and test engineering properties (to American Society of Trade Manufacturers specifications) to achieve maximum performance and cost/process efficiency when used in the end product. Coordinate projects with plant, engineering, marketing, vendors and throughout the various stages of production. Perform scale-ups, debottleneck and optimize process parameters and make recommendation when required. Compile, issue reports and perform other related duties as assigned. Requirements: M.S. in polymer engineering. Degree specializing in rubber. One course each in: 1) Analysis and Design of Polymer-Processing Operations; 2) Engineering Properties of Solid Polymers; 3) Polymeric Materials Engineering Science; 4) Advanced Engineering Materials; and 5) Polymerization Reactor Engineering. Experience: one year in the job offered or one year as a rubber chemist. Experience in operations/testing of: Lab and Plant Size-3 Banbury-Internal mixer; Monsanto Rheometer R-100 and Mechanical Energy Resolver MER-1100A. Experience may be before, during, or after degree. 40 hours per week; 8:00 a.m. to 5:00 p.m.; \$42,000 per year. All applicants must submit two résumés and social security number to: **Ms. Cathy S. Phillips, Job Order Number SC2000496, E&T Technical Services, SCESC, P.O. Box 1406, Columbia, SC 29202.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATES Molecular Oncology

Positions available immediately in a laboratory developing new methods for diagnosis and therapy of breast and gynecological cancer. The candidate must be less than three years after obtaining a Ph.D. in biochemistry or molecular biology, and have documented experience with PCR, DNA, and RNA analysis and gene cloning. Candidates will be involved in cloning and characterization of the new female cancer virus and PCR analysis of human samples.

Please send or fax curricula vitae and names of three references to: **Dr. Eva M. Rakowicz-Szulczynska, Associate Professor, Director, Molecular Oncology Laboratories, Department of Obstetrics and Gynecology, University of Nebraska Eppley Cancer Center, 600 South 42nd Street, Omaha, NE 68198-3255. FAX: 402-559-8112.**

ANNOUNCEMENT

The Society of Environmental Toxicology and Chemistry (SETAC)/Taylor & Francis Advanced Training Fellowship, sponsored by Taylor & Francis Publishers and the *Journal of Toxicology and Environmental Health*, provides funds of up to \$10,000 per year to predoctoral or postdoctoral SETAC members worldwide for off-site specialized training in environmental toxicology, environmental chemistry, or ecological risk assessment (e.g., a major summer course, a certification class, or training in another laboratory). For an application package and SETAC membership details, contact: **Rodney Parrish, Executive Director, SETAC, 1010 North 12th Avenue, Pensacola, FL 32501-3370, USA. Telephone: 904-469-1500; FAX: 904-469-9778; Email: rparrish@setac.org. Applications for the 1996-1997 awards must be postmarked by March 1, 1996.**

COURSES AND TRAINING

GRADUATE TRAINING IN MOLECULAR ONCOLOGY AND IMMUNOLOGY

Stipends are available for students pursuing a Ph.D. in an integrated program in molecular oncology and immunology beginning September 1996. The principal interests of participating faculty are molecular mechanisms of tumorigenesis including oncogenes and tumor suppressors, repair of DNA damage, signal transduction and growth control, as well as molecular, cellular, and tumor immunology.

Students will be supported chiefly by an NIH programmatic training grant, requiring U.S. citizenship, or resident status. Limited funding is also available outside of this source. Information and application forms are available from: **Dr. R. B. Carroll, Graduate Student Advisor, Department of Pathology, New York University Medical School, 550 First Avenue, New York, NY 10016. We strongly encourage applications from minority students.**

Doctoral Program in Molecular and Cellular Biology and Pathobiology

Interdisciplinary program in fundamental molecular and cellular biology and its application to disease. Competitive stipends of \$15,000 available. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2501.**

Medical University of South Carolina (MUSC)

Offers programs leading to Ph.D. and M.D./Ph.D. degrees in each of the basic biomedical sciences (biochemistry, microbiology/immunology, pathology, pharmacology, physiology), biometry/epidemiology, pharmaceutical sciences, and molecular and cellular biology. Competitive stipends of \$15,000 available. Contact: **College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425-2501.**

SCIENCE ENTERS CYBERSPACE!

The world of **SCIENCE** On-line:

- **SCIENCE Electronic Marketplace** • Beyond the Printed Page
- **SCIENCE GLOBAL CAREER NETWORK** • **SCIENCE On-line**

Science
COVERS THE WORLD

SCIENCE WWW Address:
<http://www.aas.org>

COMPUTER MARKETPLACE

For Mac Lovers
The best bibliography software
-only for the Mac-

bookends pro ver. 3.2

e-mail: westing3@aol.com

<http://www.westinginc.com/westing>

Phone: 1-800-325-1862

Circle No. 19 on Readers' Service Card

Oligonucleotide Design Software

☆ **HYBsimulator™** ☆

Using the nearest neighbor model, **HYBsimulator** will simulate the hybridization of a large group of oligonucleotides with a large database (**GenBank**) (**Computer Hybridization Simulation**) to design optimal oligonucleotides with insight into the biological system. *Imagine the possibilities...*

AGCT (800) 494-AGCT (714) 833-9983

Circle No. 11 on Readers' Service Card

STATISTICAL SOFTWARE

Announcing **NCSS 6.0** for Windows: an accurate, easy to learn, statistical system. Includes t-tests, Anova, chi-square, survival analysis, regression analysis, multivariate analysis, graphics. Data may be imported from over 30 database and spreadsheet formats. Output may be read by your Windows word processor. Thousands of users. \$395. Ask for Dr. Hintze (PhD Statistician) at (800) 898-6109, fax (801) 546-3907. E-mail address: ncss@ix.netcom.com. Web page: WWW.ICW.COM/NCSS.

Circle No. 9 on Readers' Service Card

MARKETPLACE

At last! It's here!!

Studmuffs of Science 1996 Calendar

Includes: Meeting Dates, Grant Deadlines and Milestones in Science History!

Send \$14.95 to Studmuffs of Science
Box 3382, Grand Central Station, NY, NY 10163
or call MIT Museum (617) 253-4462
Visit us at www.studmuffs.com

Circle No. 46 on Readers' Service Card

NEW SCIENCE TRAVEL

25 - 50% Discount



Hotels
Airlines
Car Rentals
Vacations
and more

Ph: 800-574-9276, Fax 334-724-0378

Circle No. 37 on Readers' Service Card

Marketplace ads continue on page 2062

MARKETPLACE

CUSTOM ANTIBODIES
TO PEPTIDES & PROTEINS

Purification, Conjugation and ELISA Titration Available



HTI BIO-PRODUCTS, INC.

1 (800) 481-9737 OR (619) 788-9691 Fax (619) 788-9694

Circle No. 17 on Readers' Service Card

NEW NO ANALYZER

Chemiluminescence
Model 280

• Exhaled Breath • Cell Culture • Plasma

Phone (303) 444-2009 Fax (303) 444-9543 USA

SIEVERS

Circle No. 31 on Readers' Service Card



- DNA Sequencing Automatic or Manual
- DNA Subcloning
- Library Screening

800-557-2248 (557-ACGT)
(708)559-8631 • Fax (708)559-8632New
Lower
Prices

Circle No. 44 on Readers' Service Card

CustomPeptides

Need!

Quality peptides at competitive prices.

Want to deal with an experienced company offering:

- Special amino acid containing peptides
- Synthesis of difficult sequences
- Phosphopeptides
- Biotinylated peptides
- Fluorescent labeling
- Peptide conjugation
- Large scale synthesis

Welcome to American Peptide. We can satisfy your peptide needs from small to large quantities at a **considerably reduced prices**. We offer different purity levels to match your exact needs, either for screening, antibodies production or drug development.

New 1996-97 Catalog

Comprehensive selection of bioactive peptides - Many new peptides - Highest quality - Amyloids & other peptides for neuroscience. Fax/call for a free copy!

62-0-72	β-Amyloid (25-35)	98%	0.5 mg	50.00
62-0-74	β-Amyloid (1-28)	98%	0.5 mg	85.00
62-0-78	β-Amyloid (1-40)	98%	0.5 mg	150.00
62-0-80	β-Amyloid (1-42)	98%	0.5 mg	225.00

AMERICAN PEPTIDE COMPANY

777 E Evelyn Ave. Sunnyvale, CA 94086 USA
Toll Free: 800-926-8272 Tel: 408-733-7604 Fax: 408-733-7603

Circle No. 21 on Readers' Service Card

Quality Antibodies for Signal Transduction Research

Nitric Oxide Synthase

NOS

antibodies

from

TRANSDUCTION LABORATORIES

1-800-227-4063

Brain NOS (bNOS) mAb
bNOS polyclonal
Endothelial Cell NOS mAb
ECNOS polyclonal
Induc. NOS (iNOS) mAb
(iNOS) polyclonal
(iNOS) mAb FITC conj.

Circle No. 12 on Readers' Service Card

MARKETPLACE

SURGICAL INSTRUMENTS FOR RESEARCH

A 100-page catalog of specially selected surgical instruments and accessories for the research professional. Please contact us for your FREE copy today.

415-349-1636 • Fax 415-349-3729
REPRESENTATIVES WORLDWIDE
e-mail: 73633.260@compuserve.com

VANCOUVER SAN FRANCISCO HEIDELBERG

Circle No. 44 on Readers' Service Card

Free! NEUROCHEMICALS Catalog

- Also available:
- Nitric Oxide Pathway Catalog
 - Coagulation Enzymes & Proteins
 - Endothelins Catalog

Call 1-800-900-0065
Fax (619)-658-9224

Circle No. 32 on Readers' Service Card

CUSTOM DNA SYNTHESIS

PURE & SIMPLE

- Superb Technical Support
- Impeccable Quality
- World's Fastest Service
- Cap Gel & TOF Mass Spec

* Some restrictions apply. Please call for details.

MIDLAND

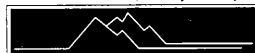
STILL THE UNDISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY

Phone 1-800-247-8766 FAX 915-694-2387
email mrcrc@oligos.com

Circle No. 1 on Readers' Service Card

Custom DNA from \$1.00/base



ransom hill bioscience, inc.

no setup, no minimum, no baloney!
internet: visio@delphi.com fax: (800) 597-8507

Circle No. 16 on Readers' Service Card

FLUORESCENT MICROSPHERES

Distinctive colors for biology, diagnostics, physiology, aerosol, and filter testing applications.

- Diameters from 0.025 μm to 10 μm in red, green, blue fluorescence
- Assorted surface properties for protein coupling
- Free catalog available

Call 800-334-3883 Toll Free or in Calif. 415-424-1177 FAX 415-424-1158

P.O. BOX 50005
2463 FABER PLACE
PALO ALTO, CA 94303

Circle No. 5 on Readers' Service Card

The Peptide Engineering Specialist

PeptidoGenic

e-mail: pkim@ccnet.com
Fax: 510-371-1156
Voice: 1-800-597-7873

Custom Peptide: \$20/residue/crude/5days

IonSpray MS Service: MS (\$30), LC/MS (\$250)

Circle No. 8 on Readers' Service Card

MARKETPLACE

CUSTOM DNA as low as
\$1.19 base UP TO 30 BASES150 nmol scale (>10 ODU)
Deprotected • No setup charges
Synthesis report • 24-48 hours shippingCUSTOM PEPTIDES as low as
\$20 residue 8-30 RESIDUES1540 mg • No setup charges
Free mass spec & HPLC tracing
Desalted • 5-8 days shipping

1-800-227-0627

FAX 214-420-0442

BIO-SYNTHESIS
INCORPORATED

E-Mail: biosyn@compuserve.com

Internet: http://www.biosyn.com

FDA#001235 • NIEBPA#263-00033171-04-BPA/C

Circle No. 13 on Readers' Service Card

SFM-Human Keratinocyte Cell System

Start up a 75 for LESS than a 25
More Cells / Lowest Price / Highest Quality
CSC Certificate™ #30467

1-800-697-1211

Circle No. 25 on Readers' Service Card

Custom Polyclonal Antibodies

BEST PRICES • BEST ANIMALS

ANIMAL PHARM SERVICES

INCORPORATED

(800) 808-0550

Circle No. 27 on Readers' Service Card

FETAL BOVINE SERUM

Triple 0.1um filtered • Certified FMD & BSE Free • USDA Inspected

HIGH QUALITY **ATLANTA** biologicals LOW PRICES

Call or Fax for Information, Pricing and a FREE Cell Culture Catalog.

FREE Samples and Quantity Discounts are available.

PH: (800) 780-7788 FAX: (800) 780-7374
(404) 446-3336 (404) 446-1404

Circle No. 14 on Readers' Service Card

Express Peptides

15 mg in 5 days
\$18 per residueResearch Genetics, Inc.
1-800-533-4363

Circle No. 2 on Readers' Service Card

NOW THAT
OPERON'S DNA *is*
just **\$1.20** PER BASE,
YOUR *savings* ARE
SURE TO multiply.



NOW OFFERING
CUSTOM GENE
SYNTHESIS

Here's something you can bank on. A 50 nmole scale synthesis of Operon's custom DNA for just \$1.20 per base, with a \$10.00 set-up fee.

This new, affordable price not only means you'll be able to conduct more experiments, it means your savings will grow with each project. And with our reputation for high-quality DNA, you'll get the results you need every time.

Of course, we still offer our 0.2 μ mole scale for \$2.00 per base with a \$15.00 set-up fee and our 1.0 μ mole scale for \$2.80 per base with a \$20.00 set-up fee.

Thanks to Operon's knowledgeable and experienced staff, you can always count on us for unmatched customer service, too. Because when it comes to meeting your needs, we really know how to hop to it.

For more information, or to place an order, call us toll-free at **1-800-688-2248**.

OPERON

WORLD'S LEADING SUPPLIER OF SYNTHETIC DNA

© 1995 Operon Technologies, Inc. 1000 Atlantic Ave., Alameda, CA 94501, USA. Phone: (800) 688-2248 or (510) 865-8644. Fax: (510) 865-5255. E-mail: dna@operon.com. NIHBP 263.00033233.
WWW URL: <http://operon.com>

Circle No. 28 on Readers' Service Card

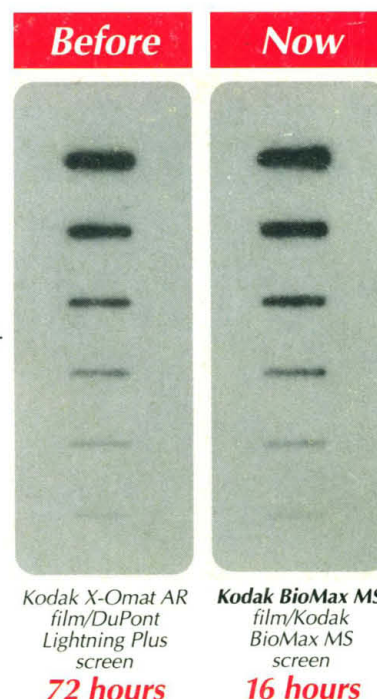
It's About Time!

Kodak BioMax MS system

Detect ^{32}P samples 4 to 8 times faster with Kodak BioMax MS film and BioMax MS intensifying screen.

The BioMax MS system is the fastest autoradiography film/screen combination available. Using state-of-the-art Kodak technology, the film and intensifying screen work together to advance the boundaries of maximum sensitivity. With the BioMax MS system you can:

- Reduce 4-day exposures to 1 day
- Reduce overnight exposures to 4 hours
- Detect 1-dpm bands in 1 day



Save 25%

Purchase a special combination pack of BioMax MS film and a BioMax MS intensifying screen (8 x 10 in., CAT No. 116 5893; 35 x 43 cm, CAT No. 118 8077). Contact your distributor or call Kodak Scientific Imaging Systems at (800) 225-5352 or (716) 722-5813.



Scientific Imaging Systems



Depend on Kodak films for life science research, from the maximum resolution BioMax MR film to the general purpose Kodak X-Omat AR film and the economical Kodak X-Omat LS film.

© Eastman Kodak Company, 1995 KODAK, BIOMAX, and X-OMAT are trademarks of Eastman Kodak Company.

In the U.S.: Baxter Scientific Products (800) 234-5227/Sigma Chemical Company (800) 521-8956/VWR Scientific (800) 932-5000. Outside the U.S.: **Australia/New Zealand** Integrated Sciences Ltd. (02) 417 7866 **Belgium** Sigma-Aldrich N.V./S.A. 0800 14747/INTEGRA Biosciences AG (01) 830 22 77 **Canada** InterSciences Inc. (800) 661-6431 or (905) 940-1831 **Denmark** Struers KEBO Lab A/S (43) 86 87 88 **Finland** KEBO Lab OY (90) 804 4900 **France** Sigma-Aldrich Chimie S.a.r.l. 05 21 14 08/INTEGRA Biosciences S.A. (1) 39 59 84 42/Kodak-Pathé (film only) 64 61 21 77 **Germany** Sigma-Aldrich Chemie GmbH 0130 5155/INTEGRA Biosciences GmbH (06404) 8090 **India** Biotech India (542) 311473 **Israel** TAMAR Ltd. (02) 52 02 79 **Italy** Sigma-Aldrich S.r.l. 1678-27018/M-Medical srl (055) 5001871 **Japan** Cosmo Bio (03) 5632-9610/Kodak Japan (03) 5488-2139/Sigma-Aldrich Japan K.K. (03) 5640-8850 **Korea** LRS Laboratories Inc. (02) 924 86 97 **Netherlands** Sigma-Aldrich N.V./S.A. 06 0224748/INTEGRA Biosciences AG (01) 830 22 77 **Norway** KEBO Lab AS (022) 90 00 00 **Singapore** Research Instruments, Pte. (65) 775-9228 **Spain** Quimigranel s.a. (91) 556 16 14 **Sweden** KEBO Lab AB (08) 621 34 00 **Switzerland** Sigma Chemie 155 00 20/INTEGRA Biosciences AG (01) 830 22 77 **Taiwan** Long Chain International Corp. (02) 552-2605 **United Kingdom** Scientific Imaging Systems, Ltd. 01223 24 28 13/Sigma-Aldrich Co. Ltd. 0800 373731

Circle No. 38 on Readers' Service Card