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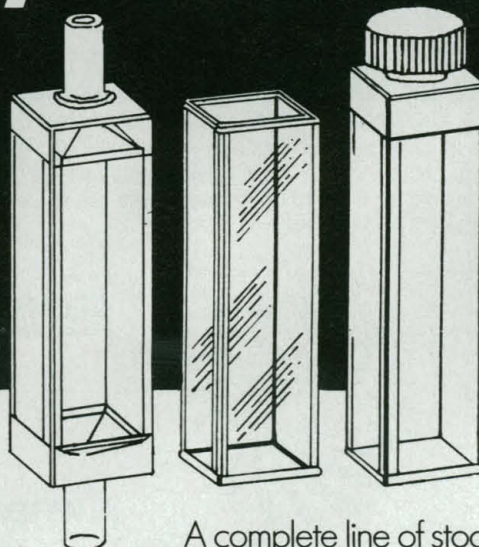


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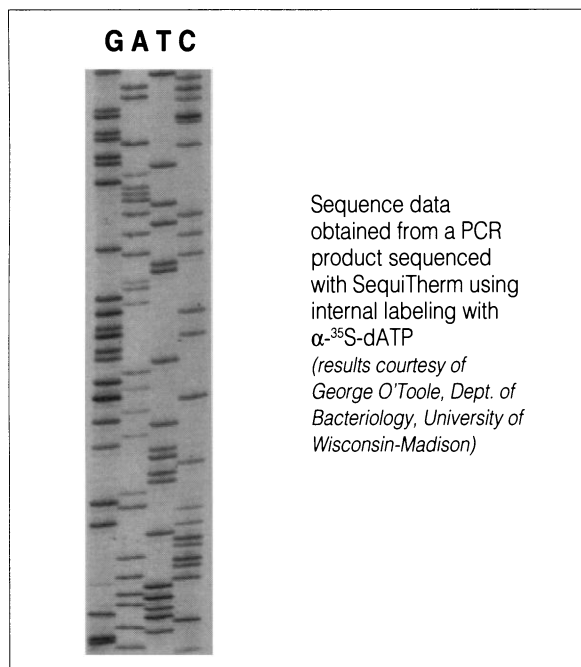
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"Here's why the SequiTherm™ Cycle Sequencing Kit may replace modified T7 DNA polymerase for sequencing."

6 reasons you can easily verify with your own template...

- 1. SequiTherm is as effective for sequencing double-stranded DNA as single-stranded DNA, using the same easy protocol.** Time-consuming and laborious methods are required to obtain sequence results from double-stranded DNA using modified T7 DNA polymerase. With SequiTherm, you can sequence PCR products, plasmids, cosmids or other dsDNA faster and easier – without subcloning into M13-type vectors or preparing single-stranded DNA.



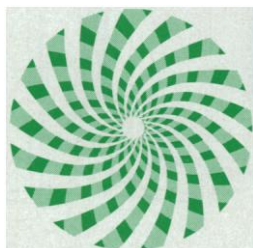
- 2. Much less template is needed to sequence with SequiTherm.** As little as 5 femtomoles or less of template DNA is sufficient for sequencing with SequiTherm, so you can sequence DNA from single bacterial colonies or phage plaques. At least 20 times more template is required using modified T7 DNA polymerase.

- 3. The purity of the template is less critical for sequencing with SequiTherm.** Since SequiTherm reactions are performed at elevated temperatures (eg. 70°C), unreadable sequences due to false priming are much less likely, especially when end-labeled primers are used. Template preparation is quicker and simpler, and you get better sequencing results *consistently*.
- 4. Sequences obtained using SequiTherm are more accurate.** Gel bands corresponding to the correct sequence can be weak or even missing ("dropouts") using modified T7 DNA polymerase or other cycle sequencing kits. SequiTherm is less prone to dropouts.
- 5. SequiTherm gives good sequence data from templates which have high G-C content or a lot of secondary structure.** The high temperatures used for sequencing with SequiTherm reduce or eliminate secondary structure of DNA templates. Sequencing reactions with T7 DNA polymerase are carried out at 45°C or less.
- 6. Electrophoresis of SequiTherm reactions results in gels with uniform band intensities like T7 DNA polymerase.** Band intensities are less uniform with other sequencing kits.

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*SequiTherm is a trademark of EPICENTRE TECHNOLOGIES, Madison, Wisconsin.



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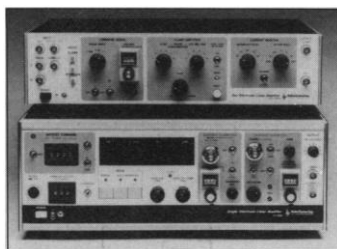
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Circle No. 33 on Readers' Service Card



Electrophysiology Instruments

Model VC-1200 two-electrode voltage clamp and model VC-3100 single-electrode voltage clamp are new instruments for electrophysiology. Two-electrode voltage clamping is a powerful technique for studying electrical currents occurring in cell membranes. One electrode is used to record membrane potentials while the other electrode passes the clamping current. The VC-1200 has been designed with a wide current and voltage capacity. Single-electrode clamping is for the study of electrical events in small cell membranes. The VC-3100 was designed to distinguish between actual membrane potentials and artifacts. It features a miniature low noise headstage and advances to simplify the clamping procedure. **Medical Systems Corp. Circle 89.**

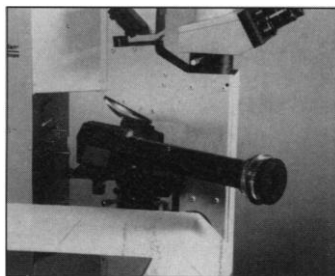
Curve-Fitting Software

TableCurve Windows is an upgrade of a program to help researchers find the best equation to fit their experimental data. TableCurve automatically fits and ranks 3320 built-in and user-defined equations by order of best fit in a single, rapid processing step. The user can then review graphs and complete statistical summaries, including full parameter values, of any selected equation. The built-in equation set totals 3304 linear equations and 14 nonlinear equations. Two user-defined equations can be added to the equation list and processed and ranked along with the built-in functions. Data can be entered manually or imported

from a variety of file formats. The program requires an IBM-compatible computer with DOS 3.3 or higher and Windows 3.1 with compatible graphics card, a hard disk with 2.5 megabytes of free memory, and 4 megabytes of random access memory. **Jandel Scientific. Circle 90.**

Side Port Reflectance Accessory

The Side Port Reflectance Accessory (SPRA) for Spectra-Tech's IR-Plan Fourier transform infrared spectroscopy microscopes permits external reflectance measurements to be made with samples that are either too large



or too thick to fit onto the microscope stage. The SPRA allows the user to perform nondestructive analyses of small portions of large samples in the reflectance mode. The SPRA attaches to the nosepiece of the IR-Plan family of microscopes and can be positioned at different angles to accommodate the sample. **Spectra-Tech. Circle 91.**

Expanded DNA Sequencer

The 373 DNA Sequencer now has expanded capabilities that include automated DNA sizing and quantitation as well as sequencing. This broader application is possible because the electrophoresis chamber accepts gel

plates in three sizes. The plate size determines the distance (6, 12, or 24 cm) that fluorescently labeled fragments migrate before laser detection. This is a straightforward means to optimize run time and fragment resolution with a vertical gel format. Results are generated using specialized analysis software. Advantages of the sequencer over autoradiography include the use of multiple fluorescent labels to tag samples from various genotypes as well as from a DNA size standard. **Applied Biosystems. Circle 92.**

Technical Presentation Software

SlideWrite Plus for DOS version 5.0 is technical presentation graphics software with advanced curve-fitting and statistical capabilities for users of DOS-based personal computers. The software provides a full range of linear, nonlinear, and weighted curve-fitting functions and statistical analysis, in conjunction with sophisticated drawing and text capabilities that result in professional-quality slide output. It has a what-you-see-is-what-you-get interface and pull-down menus. It will accept data from Lotus and ASCII files. It supports virtually every output device available, including dot matrix and laser printers, plotters, 35-mm film recorders, and slide service bureaus. **Advanced Graphics Software. Circle 93.**

Monoclonal Antibodies

A line of monoclonal antibodies for studying leukocyte-endothelial interactions includes β_2 integrins, E-selectin (anti-ELAM-1), P-selectin (anti-GMP-140), anti-ICAM-1, anti-integrin α_4

(VLA-4), L-selectin (anti-LECAM-1), anti-VCAM-1, and anti-sialyl-Le^x. Additions to the line for cell adhesion research include anti-integrin α_2 , anti-integrin β_3 , anti-integrin β_4 , CD45RO, mouse IgG₁ control, mouse Ig_{2a} control, and mouse IgG_{2b} control. **Becton Dickinson Advanced Cellular Biology. Circle 94.**

Literature

Centricon Concentrators is a six-page publication describing a line with molecular weight cutoffs of 3,000, 10,000, 30,000, 50,000, and 100,000. *Improving Protein Recovery with Centricon Concentrators* provides a protocol for pretreating plastic concentrators to reduce nonspecific binding of solutes during ultrafiltration. **Amicon. Circle 95.**

Microfocus Optical Length Measurement System describes a personal computer plug-in board that provides such a system. **UBM Corp. Circle 96.**

Ultracarb: The Most Reproducible Reversible Phase Column... is a brochure on a high-performance liquid chromatography column for the analysis of fat-soluble and water-soluble vitamins that provides a wide variety of separations of both classes. **Phenomenex. Circle 97.**

Media Selection Guide summarizes the properties of different chromatographic supports used in both laboratory-scale and process-scale chromatography. **Bio-Rad Labs. Circle 98.**

Pore Trends is a newsletter that provides an update on microfiltration, including application notes and new products. **Poretics Corp. Circle 99.**

Data Sheet #425A provides technical information on the efficiency of nylon wool fiber columns compared with sheep red blood cell rosetting for T cell and B cell separation. **Polysciences. Circle 100.**

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

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POSITIONS OPEN

A tenure-track ASSISTANT PROFESSORSHIP is available in the Department of Biology, The Catholic University of America, beginning September 1993. We seek an individual with primary interests in Immunology or Neurobiology, but exceptional candidates in other areas are encouraged to apply. Applicants should have the ability to establish a vigorous independent research program in a department that also emphasizes undergraduate and graduate teaching. Position subject to administrative approval. Send curriculum vitae, statement of research and teaching interests, and three letters of recommendation to: Dr. Lorette Javois, Department of Biology, The Catholic University of America, Washington, DC 20064. Closing date, April 10, 1993. *Affirmative Action/Equal Opportunity Employer.*

COMMUNITY ECOLOGIST

The Department of Biology and Microbiology, University of Wisconsin-Oshkosh, invites applications for an anticipated tenure-track ASSISTANT PROFESSOR position starting September 1993. Responsibilities include: teach Community Ecology, Introductory Biology and Vertebrate Biology; develop research program, pursue extramural funding, and supervise M.S. theses. Ph.D. required; postdoctoral and teaching experience desirable. Closing date: April 9, 1993. Send application, curriculum vitae, 3 letters of recommendation and transcripts to: M. A. Rouf, Chair, Department of Biology & Microbiology, University of Wisconsin-Oshkosh, Oshkosh, WI 54901. *The University of Wisconsin-Oshkosh is an Affirmative Action/Equal Opportunity Employer.*

UMD

New Jersey

THE DEPARTMENT OF MOLECULAR GENETICS AND MICROBIOLOGY, UMDNJ-ROBERT WOOD JOHNSON MEDICAL SCHOOL is seeking two candidates for faculty positions at the ASSISTANT, ASSOCIATE or FULL PROFESSOR level. Applicants with a strong research background and outstanding scholarly accomplishments will be considered in all areas related to molecular genetics, microbiology and immunology. Please send curriculum vitae, a concise statement of research accomplishments and plans, and the names of four references to: Dr. Sidney Pestka, Chairman, Department of Molecular Genetics and Microbiology, University of Medicine & Dentistry of New Jersey-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. UMDNJ, *New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V*, and a member of the University Health Systems or New Jersey.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND FACULTY OF MEDICINE MOLECULAR BIOLOGY

Applications are invited for one, and possibly two, tenure-track positions as ASSISTANT PROFESSOR of Molecular Biology within the Division of Basic Medical Sciences. Applicants should possess a Ph.D. or equivalent and relevant postdoctoral training and will be expected to develop an independent, externally funded research programme. The Division of Basic Medical Sciences consists of approximately 45 scientists with strong research groups in cardiovascular physiology, human genetics, immunology, molecular biology and neuroscience. The molecular biology group has existing strengths in cancer research, virology, human genetics and developmental biology. The modern, well-equipped laboratories of the Faculty of Medicine are housed adjacent to the General Hospital in the Health Sciences Centre on the campus of Memorial University.

Applicants should submit curriculum vitae and a brief statement of research interests and future plans, by May 15, 1993, and arrange to have three letters of reference forwarded to:

Dr. R. S. Neuman
Associate Dean of Basic Medical Sciences
Faculty of Medicine
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POSITIONS OPEN

FACULTY POSITIONS IN MOLECULAR PHARMACOLOGY

Tenure-track positions at both the ASSISTANT and ASSOCIATE PROFESSOR levels are available in the Department of Pharmacology, College of Medicine, University of Kentucky. The Department is seeking individuals with expertise in molecular biological or patch clamp approaches relevant to steroid function, ligand- and voltage-gated calcium channels, brain aging, neuroscience, drug metabolism or cancer, among others. Excellent facilities and start-up support are available in an expanding research setting. The tenure-track positions are state-funded and salaries are highly competitive. The successful candidate for Assistant Professor should demonstrate strong potential for development of an independent, extramurally funded research program, as well as for participation in collaborative programs. The successful candidate for Associate Professor should already have in place a well-regarded, extramurally funded research program, and should have teaching, collaborative and administrative experience commensurate with the Associate Professor level. Teaching in both medical and graduate student pharmacology courses is part of the responsibilities of each position. Minimal requirements include a Ph.D. and 2 to 3 years of postdoctoral training. Applicants should send curriculum vitae, a brief summary of research interests, and the names and addresses of three references to:

Search Committee
Department of Pharmacology
College of Medicine
University of Kentucky
Lexington, KY 40536-0084

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

VASCULAR PLANT TAXONOMY—The University of North Alabama announces the availability of a temporary (non-tenure-track) position in the Department of Biology for the fall 1993 and spring 1994 semesters beginning August 23, 1993, at the ASSISTANT PROFESSOR rank, contingent upon the availability of funds. The position requires a Ph.D. degree with a background in vascular plant taxonomy and a strong commitment to excellence in undergraduate teaching. Responsibilities include teaching in the areas of botany, introductory biology, student advising, herbarium work and research related to the specialty area. Salary commensurate with degree, rank, and experience. *Women and minority candidates are encouraged to apply.* Submit a letter of application by April 16, 1993, accompanied by curriculum vitae (including transcripts), and the names, addresses, and telephone numbers of three references to: Mr. Robert S. Steen, Director of Human Resources and Affirmative Action, Box 5043, University of North Alabama, Florence, AL 35632-0001. *An Equal Opportunity Employer.*

COORDINATOR/FULL or ASSOCIATE PROFESSOR, LIFE SCIENCES PROGRAM. Arizona State University (ASU) West invites applications for the position of Life Sciences Program Coordinator/Full or Associate Professor. **POSITION DESCRIPTION:** Responsibilities are similar to those of a department chair, with added task of building Southwestern ecology and pre-professional biology tracks of new interdisciplinary degree program. Opportunity to develop innovative, high-quality programs focusing on ecology of the Southwest, and pre-professional biology in collaboration with a local biomedical research institute. **REQUIRED QUALIFICATIONS:** Ph.D. in Zoology or Biology; at least (3) years of combined teaching and administrative experience in a tenure-track position; strong publication and grants record appropriate to level of appointment. **DESIRED:** Experience teaching and administering in interdisciplinary life sciences programs; experience related to new program development. **APPLICATION PROCEDURES AND DEADLINES:** Send letter of application describing qualifications, curriculum vitae, a minimum of three professional references (including telephone number), and small sample of publications to: Chair, Life Sciences Search Committee, Arizona State University West, P.O. Box 37100, Phoenix, AZ 85069-7100. Applications must be received by March 31, 1993, or by the end of each succeeding month until the position is filled. Position subject to funding availability. *ASU West is an Equal Opportunity/Affirmative Action Employer.*

Research Opportunities In The Neurobiological Sciences.

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

Cell Differentiation and Transplantation **William J. Freed, PhD**

Cellular differentiation and neurotransmitter (amino acid) uptake and release are being studied using neuronal cell lines *in vitro* and transplantation of cell lines into animals. Opportunities are available to utilize a variety of methods related to *in vitro* studies, develop cell lines, and conduct studies using intact animals. Knowledge of HPLC techniques and no more than three years of postdoctoral research experience are required. Neuropsychiatry Branch (OE-29), NIMH, Neuroscience Center at St. Elizabeths, 2700 Martin Luther King Avenue, SE, Washington, DC 20032.

Cellular and Molecular Neurobiology **Vittorio Gallo, PhD**

Neurotransmitter receptors in glial cells are studied using molecular, biochemical, and pharmacological techniques. The expression of genes encoding receptor subunits is studied in cell culture to understand neurotransmitter receptor functional properties and their role in development. Experience in molecular or cellular biology is required. Laboratory of Cellular and Molecular Neurophysiology (OE-29), NICHD, Building 36, Room 2A21.

Molecular and Developmental Neurobiology **Denes v. Agoston, MD, PhD**

The developmental regulation of the neurotransmitter phenotype is being studied using molecular and cell biological approaches, including various recombinant DNA techniques and the study of protein-DNA interactions. Specific areas of research include identification and isolation of genes that are uniquely expressed during neurodifferentiation. A proven background in molecular biology, preferably with experience in cell culture, is required. Laboratory of Developmental Neurobiology, NICHD, Building 36, Room 2A21.

Neuroendocrinology and Neuroimmunology **Eva Mezey, MD, PhD**

Two positions are available to study the regulation of immune function in the gastrointestinal system by the CNS and the role of CNS catecholamines in stress. Experience in neuroanatomy and neuroanatomical techniques, molecular biological techniques, *in situ* hybridization, histochemistry, experimental surgery, or basic immunology is preferred. Candidates must have five or fewer years postdoctoral experience. Clinical Neuroscience Branch (OE-29), NINDS, Building 36, Room 3A17.

Neuropharmacology **Joseph M. Masserano, PhD**

Neurotransmitter systems in both human and animal tis-

ues are being studied using neurochemical and molecular biological techniques to understand the biochemical nature of schizophrenia and other neuropsychiatric disorders. Experience in neuropharmacology, neurobehavior, neurochemistry or molecular biology is preferred, and applicants must have less than five years postdoctoral experience. Laboratory of Neuropsychiatry (OE-29), NIMH, Neuroscience Center at St. Elizabeths, 2700 Martin Luther King Avenue, SE, Washington, DC 20032.

Regulation of Gene Expression **Michael Brenner, PhD**

The factors involved in the regulation of gene expression in the central nervous system are being examined using *in vitro* transcription, cell transfection, and transgenic mice. Current studies focus on *gfa*, a gene responsible for encoding an intermediate filament protein found primarily in astrocytes. Experience in molecular biology, biochemistry, or cell culture is desirable. Laboratory of Molecular Biology (OE-29), NINDS, Building 36, Room 3D02.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are "7,Even,1". When connected to NIH, type in ",vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

A catalog describing NIH research opportunities may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov", port "70". Select NIH Information to reveal the NIH Office of Education directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

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



National Institutes Of Health

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POSITIONS OPEN

FACULTY POSITIONS CELL BIOLOGY AND ANATOMY

The Department of Cell Biology and Anatomy and the Basic Science Section of the Cardiovascular Developmental Biology Center at the Medical University of South Carolina seek to fill several positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level over the next two years. Applicants should have a Ph.D. and/or M.D. degree, proven record of accomplishments as a postgraduate or faculty member, and should desire a highly interactive collegial atmosphere. We are seeking individuals interested in cell and/or developmental biology in either vertebrate or non-vertebrate systems. Candidates with a strong background in molecular biology are preferred. The successful applicants are expected to develop externally funded research programs and to participate in graduate and medical student teaching. Generous start-up packages, technical assistance, and access to core facilities, centers and graduate training programs will be provided. Interested individuals should contact: **Timothy P. Fitzharris, Ph.D., Professor and Associate Chairman, Department of Cell Biology and Anatomy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

An Equal Opportunity/Affirmative Action Employer.

SENIOR RESEARCH ASSISTANT PROFESSOR. Section of Allergy/Immunology, East Carolina University School of Medicine is seeking a senior-level research associate to study anti-inflammatory mediators in asthma. Applicant must have a Ph.D. and experience in animal physiology, immunology, pharmacology, or closely related field and at least two years of postdoctoral experience. Please send curriculum vitae and three references to: **W. James Metzger, M.D., Department of Medicine, East Carolina University, Greenville NC 27858-4354.** *East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employee ability prior to final consideration for this position.*

MARINE ECOLOGIST

The Department of Marine Biology in the College of Geosciences and Maritime Studies of Texas A&M University at Galveston is accepting applications for a 9-month, tenure-track **ASSISTANT PROFESSOR** faculty position in marine ecology beginning as early as fall 1993. Preferred applicants should have a broad background in fisheries ecology, population dynamics, and/or community structure. Persons employing modern analytical methods in the management of living marine resources are encouraged to apply. The successful applicant is expected to teach one course in marine ecology and, depending on field of interest, a course in population/community dynamics, quantitative fisheries management or fisheries ecology; develop a vigorous, externally funded research program; and direct graduate students. A joint appointment may be available to the successful applicant in the Department of Wildlife and Fisheries Sciences and/or Oceanography on the Texas A&M University campus at College Station. Applicants should send curriculum vitae, one-page descriptions of research and teaching goals, copies of research papers or manuscripts, and names, addresses and telephone numbers of three references to: **Dr. Randall Davis, Department of Marine Biology, Texas A&M University at Galveston, P.O. Box 1675, Galveston, TX 77553-1675, by May 1, 1993.**

An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR: The Department of Neurology at the University of Texas Southwestern Medical Center at Dallas seeks a BC/BE neurologist to conduct basic neuro-oncologic research and participate in the teaching and administrative programs of the department. Facilities available will allow the position to consult on 1 or 2 new neurology patients per week and to participate in the multidisciplinary neuro-oncologic clinic. There will be supervision of one research technician. The candidate must have postgraduate fellowship training in clinical neuro-oncology (at least 1 year) and molecular neuro-oncology (at least 2 years). Candidate must have, or be eligible for, a Texas medical license. Forty hours per week. Send curriculum vitae and cover letter to: **Dr. S. Clifford Schold, Jr., Chairman, Department of Neurology, UT Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235-9036.** *UT Southwestern is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Department of Chemistry of Northern Michigan University is seeking applicants for tenure-track faculty positions (one is anticipated) in Biochemistry at the **ASSISTANT PROFESSOR** level starting fall 1993. Applications are invited from candidates who have a Ph.D. in Biochemistry, ideally with postdoctoral experience and a strong commitment to teaching and research at the undergraduate and graduate level. Primary teaching responsibilities will be undergraduate and graduate biochemistry and organic chemistry courses. Supervision of undergraduate and graduate student research is expected and some start-up funds are available for establishing a research program. *Northern Michigan University is deeply committed to developing a diverse applicant pool. Women and minorities are especially encouraged to apply.* Initial screening began March 1, 1993. Interested candidates should send curriculum vitae, transcripts, a statement of research interests and a list of three references to:

**Roger D. Barry, Professor and Head
Department of Chemistry
Northern Michigan University
Marquette, MI 49855**

Northern Michigan University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY—Temporary, full-time, one-year position beginning August 26, 1993. Ph.D. degree required. Teaching responsibilities include plant systematics with emphasis on local flora, introductory biology laboratories, and advanced course(s) in area of expertise for undergraduate research experiences in plant systematics and plant ecology. A letter of application, curriculum vitae, transcripts, and three letters of recommendation must be sent to: **Dr. Emily Oaks, Chair of Search Committee, Department of Biology, SUNY College at Oswego, Oswego, NY 13126.** Review of applications will begin April 9, 1993; however, they will be accepted until the position is filled. *SUNY Oswego is an Equal Opportunity and Affirmative Action Employer. Women, persons of color, and disabled persons are encouraged to apply.*

TENURE AND NON-TENURE-TRACK POSITIONS ASSISTANT/ASSOCIATE PROFESSOR BASIC RESEARCH IN RESPIRATORY RELATED BIOLOGY

The University of Cincinnati College of Medicine is seeking faculty to further their program in basic molecular and cellular biology related to the respiratory system. Candidates should be M.D. or Ph.D. with proven research experience. The current program has several areas of concentration (receptors, asthma, inflammation, structural biology, transgenic models, cystic fibrosis) but candidates with other expertise broadly applicable to lung biology are encouraged to apply. Associate Professor candidates must have independent grant support. We have a progressive partnership with the pharmaceutical industry which can provide additional support for asthma related research.

Interested candidates should send curriculum vitae to: **Stephen B. Liggett, M.D., University of Cincinnati Medical Center, Departments of Medicine (Pulmonary), Molecular Genetics & Pharmacology, 231 Bethesda Avenue, Cincinnati, OH 45267-0564.**

REGENTS PROFESSOR OF CHEMISTRY

The Chemistry department of Tulane University is seeking a senior chemist at the Full Professor level to fill the newly created Regents Professorship of Chemistry. We are particularly interested in applicants with an outstanding record of publication and funding in Analytical Chemistry or any area of chemical research with a significant environmental emphasis. The professorship is intended to be an integral part of a growing University initiative in environmentally related research. The department is interested in attracting the best possible candidate for the position and is willing to provide substantial start-up support and an attractive salary. Interested persons should submit curriculum vitae, a brief summary of future research plans and a list of at least three references to: **Faculty Search Committee, Department of Chemistry, Tulane University, New Orleans, LA 70118** by May 1, 1993. *Tulane is an Affirmative Action/Equal Opportunity Employer and women and minorities are encouraged to apply.*

POSITIONS OPEN

FACULTY POSITION

The Departments of Pharmacology and Surgery at Wayne State University School of Medicine invite applications for a joint tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Both Departments have recently undergone major expansions in faculty and facilities with an emphasis on modern molecular approaches to biomedical sciences. Preference will be given to candidates applying molecular biological approaches. A Ph.D. or M.D./Ph.D. in Pharmacology or a related discipline with at least two years of postdoctoral experience is required. The candidate must also have experience in molecular biology. Faculty members are expected to establish vigorous independent research programs and to participate in teaching graduate, medical and postdoctoral students. An attractive start-up package including new facilities and generous start-up funds will be available. Send curriculum vitae, three letters of reference and a brief outline of current research activities and future research plans to: **Dr. Paul F. Hollenberg, Chairman, Department of Pharmacology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

THE DEPARTMENT OF MECHANICAL ENGINEERING, University of California at Berkeley seeks applications for a tenure-track position in Bioengineering and/or Biotechnology effective July 1, 1993. Applicants should hold a doctorate and have strong interests in teaching and research. The position is open in general to all areas of Bioengineering and Biotechnology including, but not restricted to: solid mechanics, rehabilitation, dynamics, fluid mechanics, control, heat transfer, design, materials, and tissue engineering. Candidates with theoretical and/or experimental research experience are invited to apply. The Department prefers appointment at the non-tenured, **ASSISTANT PROFESSOR** rank, but tenured appointment at **ASSOCIATE PROFESSOR** or **PROFESSOR** may be considered for exceptional candidates. Applicants should apply in writing by submitting a résumé, statement of professional interests, one copy of each significant publication, and names, addresses and telephone numbers of five professional references for an Assistant-rank applicant and ten for a tenure-rank applicant to: **Search Committee: Bioengineering and Biotechnology, c/o Chairman, Department of Mechanical Engineering, University of California, Berkeley, CA 94720.** All applications received through April 30, 1993 will be considered. Applications submitted after the deadline will not be considered. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR ANATOMY AND NEUROBIOLOGY

Applications are invited for a tenure-track position commencing on or before September 1, 1993. Applicants must have a doctoral degree and extensive postdoctoral experience. A funded research program in cellular or molecular neuroscience is desirable, and preference will be given to candidates with experience in those fields. Teaching duties open in neuroscience, histology, gross anatomy. Send curriculum vitae, list of publications, summary of research goals, and at least three letters of recommendation to: **Edward G. Jones, M.D., Ph.D., Professor and Chairman, Department of Anatomy and Neurobiology, University of California, Irvine, CA 92717.** All applications should be received by May 15, 1993. *The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

UNIVERSITY OF ROCHESTER RESEARCH ASSISTANT PROFESSORS

Two scientist-level (non-tenure-track) positions available immediately for individuals with strong eukaryotic molecular biology skills. One position involves cloning and expression of ion transport proteins (**Dr. J.E. Melvin**). The second position involves expression of chimeric proteins to study the regulation of O-glycosylation (**Dr. L. A. Tabak**). To apply, please send curriculum vitae and the names of two references to either **Dr. Melvin or Tabak at: University of Rochester Medical Center, Box 611, 601 Elmwood Avenue, Rochester, NY 14642.**

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

We're Scios Nova Inc., an emerging biopharmaceutical leader with a broad technology base, including five products in clinical trials and several others in pre-clinical testing. Scios Nova is committed to being on the leading edge for the discovery, development and commercialization of novel therapies for the treatment of human disease, and is seeking individuals who share that commitment to fill the following positions in our San Francisco Bay Area location.

SCIENTIST

Analytical Methods Development

Your responsibilities include methods development and validation for recombinant biological products, coordination of stability studies within the AMD group, and supervision of 1-2 Research Associates. You will also generate data and reports suitable for PLA submission. A PhD in Biochemistry/Analytical Chemistry, coupled with 1-3 years' experience in analytical methods development and a strong HPLC background are required. Excellent communication and organizational skills are necessary. Experience with GLP/cGMP compliance is advantageous. Code S312

SCIENTIST/RESEARCH ASSOCIATE

Inflammation/Immunology

We seek an independent investigator to participate as a key member of a team introducing a new product to market. You will have responsibility for investigating the mechanism of action of a new class of inflammation inhibitors, leumedins; and contributing to the creation and evaluation of ideas about new products/programs. A degree in the Biomedical Sciences and at least 3-5 years' related experience in neutrophil and endothelial cell biology are required. Code S313

SCIENTIST/RESEARCH ASSOCIATE

Protein Chemistry

Primary duties include developing methods for purifying/characterizing proteins and peptides, and designing methods for isolating/purifying novel therapeutic agents. Along with at least 2 years' relevant experience, the ideal candidate will have a degree in Chemical Engineering, Biochemistry or related discipline. Experience in the design and operation of chromatographic processes is required. Sequencing is a plus. Code S314

Scios Nova offers a stimulating scientific environment and an outstanding compensation/benefits package. Please send your resume, indicating position code, to: Scios Nova Inc., 2450 Bayshore Parkway, Mountain View, CA 94043. Or FAX to: (415) 968-2438. EOE.

SCIOS  **NOVA**

Department of Energy Office of Energy Research

Energy Research Financial Assistance Program Notice 93-13: Human Genome Program—Ethical, Legal and Social Issues

AGENCY: Department of Energy (DOE)

ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications in support of the Ethical, Legal, and Social Issues (ELSI) activities of the Human Genome Program (HGP). This Program is a coordinated, multidisciplinary research effort aimed at developing creative, innovative resources and technologies that will lead to a detailed understanding of the human genome at the molecular level. This particular research notice encompasses research grants that address ethical, legal, and social issues that may arise from the use of information and knowledge resulting from the HGP. The DOE especially encourages the submission of applications to conduct multidisciplinary, empirical research on privacy issues from the creation, use, maintenance, and disclosure of genetic information. This may include (but is not limited to) issues of ownership and information, and the role(s) of high performance computers in information management relevant to genetic data. Applications should demonstrate knowledge of the relevant literature, and should include detailed plans for the gathering and analysis of factual information and the exploration of issues associated with the ethical, legal, and social implications of the knowledge gained from the HGP. All applications should include, where appropriate, detailed discussion of human subjects protection issues; e.g., storage of, manipulation of, and access to data. Where survey techniques are proposed, provisions to ensure the inclusion of women, minorities, and potentially disabled individuals must be described, unless specific exclusions are scientifically necessary and justified in detail. All proposed research applications should address the issue of efficient dissemination of results to the widest appropriate audience.

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will enhance public understanding of both the scientific aspects and the ethical, legal, and social aspects of the HGP. In addition, the DOE is encouraging applications for the support of conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. Educational and conference applications should also demonstrate awareness of the relevant literature, and include detailed plans for the accomplishment of project goals, including, where appropriate, video productions. In the case of educational activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of all conference, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required. Educational and conference applications must also demonstrate awareness of the need to reach the widest appropriate audience.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 15, 1993, to be accepted for merit review in September 1993 and to permit timely consideration for award in Fiscal Year 1994.

ADDRESSES: Formal applications referencing Program Notice 93-13 should be forwarded to: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, Washington, D.C. 20585, ATTN: Program Notice 93-13. The following address must be used when submitting applications by U.S. Postal Service Express Mail or any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

FOR FURTHER INFORMATION CONTACT: Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, D.C. 20585, (301) 903-6488.

SUPPLEMENTARY INFORMATION: Potential applicants are strongly encouraged to submit a preapplication in accordance with 10 CFR 600.10(d) (2), which consists of two to three pages of narrative describing research objectives, methods of accomplishment, and measures of accomplishment including anticipated products. These will be reviewed relative to the scope and the research needs of the DOE's Human Genome Program ELSI activities. Preapplications referencing Program Notice 93-13 should be received by April 1, 1993, and sent to Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), U.S. Department of Energy, Washington, D.C. 20585. Telephone and FAX numbers are required parts of the preapplication. A response to the preapplication discussing the potential program relevance of a formal application will be communicated by May 15, 1993.

The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. The OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research data and information, educational and training materials, and conference and meeting results. Funds to defray the costs of disseminating materials and results are allowable; however, such requests must be adequately justified. It is anticipated that approximately \$1,100,000 will be available for grant awards during FY 1994, contingent upon availability of appropriated funds. Multiple year funding of grant awards is also contingent upon availability of funds. Previous awards have ranged from \$5,000 per year to \$400,000 per year with terms from 1 to 3 years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the ER Special Research Grants Application Kit and Guide and 10 CFR Part 605. The application kit and guide is available from the U.S. Department of Energy, Office of Health and Environmental Research, Office of Energy Research, ER-72, Washington, D.C. 20585. Telephone requests may be made by calling (301) 903-6488. The Catalog of Federal Domestic Assistance number for this program is 81.049.

Federal Register; Volume 58, Issue 30, pg 8747.

Our entrepreneurial environment naturally evolves as a function of our mission: the development of recombinant DNA-based human therapeutics, utilizing the principles of cellular and molecular biology... through rapid product development and innovative commercialization strategies.

Postdoctoral Fellow in Developmental Biology

We are seeking a Postdoctoral Fellow to join our Developmental Biology Department. A Ph.D. in Biochemistry, Molecular Biology or a related discipline is required. ■ An interest in transgenic mice models in the areas of inflammation and tissue-specific growth factors is highly desirable. **(Job Code S-515)**

Research Associate in Developmental Biology

Your BS/MS degree, coupled with a minimum of 2 years experience in Molecular Biology and the ability to work independently will make you an ideal candidate for Research Associate.

■ You must also have experience in cloning and tissue culture, possess an interest in applying new techniques on challenging biological problems and demonstrate an understanding of Cell Biology. Knowledge of phage display desirable. **(Job Code S-514)**

At Amgen, we invest our employees with the freedom to manage their affairs, regulate the quality of work, and make decisions within company goals. And we back this freedom with meaningful challenge and responsibility, as well as a compensation and benefits package that reflects the level of our commitment. ■ If you're interested in these positions, please submit your resume, for confidential consideration, to: **Amgen Inc., Staffing, Job Code (See Above), Amgen Center, Thousand Oaks, CA 91320-1789.** We are an Equal Opportunity Employer M/F/D/V.

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There are a number of components to success in the pharmaceutical research process. The most important is our people. At Schering-Plough, we hire the best talent in our industry. Then, we provide them with the technical resources they need to do their best work: the most advanced instrumentation; the latest computerized systems; modern lab facilities. Finally, we spend over \$500 million annually on R&D, and have just completed a \$300 million R&D facility.

Commitment of this scope has helped us achieve \$4 billion in annual sales around the world.

We are seeking a Principal/Senior Principal Scientist to join our Animal Health Drug Safety and Metabolism unit. Your responsibilities will require a PhD in Analytical Chemistry (or a related field) along with a minimum of five to eight years of experience, to include: the design and conduct of GLP-compliant metabolism and residue depletion studies for veterinary pharmaceuticals in food-producing animals; in-depth knowledge of analytical methods development; and review of scientific data and reports, preparation of reports and position papers, and presentation of findings at internal and external meetings. Supervisory experience in a laboratory environment, including personnel

review and scientific program management, and the placement and monitoring of contract research studies are necessary. Familiarity with EEC and US FDA/CVM regulatory guidelines desirable.

We offer a competitive salary commensurate with your experience and education, superior benefits and the resources of our new, state-of-the-art Drug Discovery Facility. For confidential consideration, please send your resume, indicating salary requirements, to: Mr. Robert Blackburn, Human Resources, DS-93-02, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033. We are an equal opportunity employer.

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BIOCHEMICAL TOXICOLOGY/METABOLISM SCIENTIST

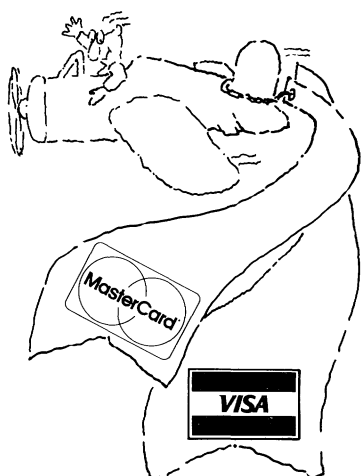
The Agricultural Group of Monsanto Company has an immediate opening for a Biochemist/Toxicologist in the Environmental Health Laboratory. This position in the Biochemical Toxicology and Metabolism Group will be responsible for the conduct of biochemical toxicology, pharmacokinetic and metabolism studies to support product registration and defense. The successful candidate should possess a Ph.D. in pharmacology, toxicology, biochemistry or related discipline with a minimum of three years post-doctoral experience. Experience as a study director/principal investigator and knowledge of GLP for toxicology studies is highly desired.

Monsanto offers an excellent compensation and comprehensive benefits package, paid relocation and an exciting environment to meet personal challenges and enhance career growth. Interested applicants should forward resume to:

**John D. Figiel,
Human Resources Manager
MONSANTO COMPANY,
700 Chesterfield Parkway North
St. Louis, Missouri 63198**

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With 21 consecutive years of record growth and close to \$8 billion in sales, it would be easy to rest on our laurels. But at Abbott Laboratories, we're not satisfied with just the status quo. Supported by significant R&D investment, our Chemical and Agricultural Products Division has exciting plans to strengthen our leadership in the development, manufacture and marketing of bulk drugs and generic compounds as well as products for crop protection, forestry and animal health. Now is your opportunity to be a significant part of our future innovation.

Research Development

Chemists - Will play an integral part in the conception, development and start-up of the chemical processes for new compounds, maximizing efficiency both in the lab and on a manufacturing scale. Depending on position, duties may also include providing support for our bulk drug manufacturing processes, typically multistep organic synthesis of sophisticated compounds. We require a MS or PhD in Synthetic, Organic or Medicinal Chemistry. A broad background in synthetic or analytical chemistry is essential as is experience in process development and pilot plant scale-up. Knowledge of regulatory, GMP and environmental factors are desirable as is experience in fine chemical and pharmaceutical manufacturing operations. **Reply to Job SCIA.**

Research Analytical Chemist - Will develop methods of analysis for bulk drugs and chemicals, low-level residues analysis methods for new products, and analytical and environmental chemistry sections for NDA/EPA submissions. We prefer a MS or PhD in Analytical Chemistry with at least 2 years of industrial or postdoctoral experience. Familiarity with Chromatography, such as HPLC, GC and TLC, is essential. **Reply to Job SCIB.**

Peptide Process Development Chemist - Will be involved in process R&D in a team environment directed toward the discovery and scale-up of new synthetic and separation processes for the preparation of research and pilot quantities of bulk peptide drugs by solution and process chemistry. We require a MS or PhD in Organic Chemistry with at least 2 years of productive bench experience and enthusiasm for large scale solution and solid phase synthesis, and purification of peptides, peptidomimetics, and unusual amino acids. **Reply to Job SCIC.**

Biochemist/Cell Biologist - Will provide technical support and develop process improvements for a bulk pharmaceutical derived from natural products. A MS or PhD in Biochemistry or Cell Biology with at least 2-10 years experience with differential centrifugation separation techniques is required. **Reply to Job SCID.**

Abbott offers an exceptional salary and benefits package including profit sharing and a stock retirement plan. We are located approximately 30 miles north of Chicago. For confidential consideration, please send resume (indicating appropriate reply code) with salary history to: **Tracey Nielsen,**
Corporate Staffing, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.
Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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POSITIONS OPEN

ASSISTANT PROFESSOR—PHYSIOLOGY ENDOCRINOLOGY/ NEUROENDOCRINOLOGY

Individuals with externally fundable research in contemporary endocrinology are invited to apply for this tenure-track position. Preference will be given to research which complements areas of neuroscience currently represented in our department or the Oklahoma Center for Neurosciences. The position requires a Ph.D., M.D., or equivalent, two years (minimum) of postdoctoral experience, and training for teaching endocrinology to medical/graduate students. Please send statement of professional interests, curriculum vitae and 3 letters of reference to: Jay P. Farber, Ph.D., Department of Physiology, BMSB 653, College of Medicine, The University of Oklahoma HSC, P.O. Box 26901, Oklahoma City, OK 73190. Completed applications will be accepted until May 15, 1993; anticipated starting time is fall 1993. *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

IMMUNOLOGIST

ASSISTANT PROFESSOR. The Research Group on Burn Injuries in Hotel-Dieu Hospital, Montreal, Canada and the Clinical Research Center of Hotel-Dieu are seeking a young investigator with a Ph.D. in immunology to pursue clinical and/or fundamental research on the immune system during injury and trauma. Send curriculum vitae, names and addresses of three references, and a statement about your research orientations to: D. R. Garrel, M.D., Clinical Research Center, Hotel-Dieu Hospital of Montreal, Quebec, Canada, H2W 1T8.

MOLECULAR GENETICIST

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning September 1, 1993. Responsibilities include teaching courses in genetics and molecular biology, an introductory course for majors emphasizing cell biology and genetics, and other courses as needed by the department. Qualifications for the position include a Ph.D., postdoctoral or comparable research experience, demonstrated interest and ability in teaching, and a desire to participate in research with undergraduates. Send curriculum vitae, undergraduate and graduate transcripts, a statement of teaching and research interests, and three letters of recommendation to: Kathleen Fishbeck, Chair, Department of Biology, St. Olaf College, Northfield, MN 55057-1098 by April 1, 1993. St. Olaf College is a co-educational liberal arts college of the Evangelical Lutheran Church of America. *St. Olaf is an Equal Opportunity Employer.*

MICROBIAL MOLECULAR BIOLOGIST

The Biology Department, George Mason University, invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** to begin fall 1993. A Ph.D. and postdoctoral experience are required. The successful candidate will be expected to establish an extramurally funded research program in the area of microbial molecular biology with an emphasis on biotechnological/industrial applications. A commitment to excellence in both undergraduate and graduate teaching will also be expected. Applications, including curriculum vitae, statement of research interests, and three letters of recommendation should be sent by April 9, 1993, to: Chairman, Molecular Biologist Search Committee, Department of Biology, George Mason University, Fairfax, VA 22030-4444.

George Mason University is an Equal Opportunity/Affirmative Action Institution.

ALBERT EINSTEIN COLLEGE OF MEDICINE DEPARTMENT OF MEDICINE, DIVISION OF CARDIOLOGY AND HEMATOLOGY

Position for **DIRECTOR** of Platelet Research Laboratory. Researcher with track record in independent platelet basic research applicable to the area of Coronary Artery Disease. Ph.D. or M.D., experience in Molecular Biology preferred, but not mandatory. Please contact: Hiltrud Mueller, M.D., Montefiore Medical Center/ Cardiology, 111 East 210th Street, Bronx, NY 10467, or FAX: (718) 920-6798.

POSITIONS OPEN

FACULTY POSITION IN HUMAN GENETICS

As the first phase of a major expansion in human genetics, the Laboratory of Genetics, University of Wisconsin-Madison, seeks to hire an **ASSISTANT** or **ASSOCIATE PROFESSOR**. Candidates should possess an M.D. and/or Ph.D. degree and direct an active research program in human genetics. Joint appointments with appropriate clinical departments are possible for M.D. applicants. Laboratory space will be available in the new Genetics-Biotechnology Building under construction. Please send curriculum vitae, a statement of research interests, three letters of recommendation, and representative reprints or preprints to: Human Genetics Search Committee, c/o Dr. Richard Spritz, 118 Genetics, 445 Henry Mall, Madison, WI 53706.

The University of Wisconsin-Madison is an Affirmative Action Employer. Women and minority scientists are encouraged to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

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For more information on how to place a line ad with a box and/or logo please contact: Millie Muñoz-Cumming at (202) 326-6555 or FAX your ad to (202) 682-0816. We will call to confirm your ad and give you an estimated cost.

PROGRAM OFFICER

The James S. McDonnell Foundation, a major private foundation having special interests in education and the behavioral and biological sciences, is seeking an energetic, resourceful professional to fill the position of Program Officer.

The successful candidate will coordinate the foundation's existing research programs in education and cognitive neuroscience, assist in identifying and formulating new program areas, evaluate grant requests and monitor the progress of ongoing grants, interact regularly with grantees and the foundation's program advisory boards, plan and coordinate national meetings, assist in preparing and presenting material to the Board of Directors, and represent the foundation locally and nationally where appropriate.

Nominees and applicants should demonstrate superior oral and written communication skills and have a proven record of strong administrative abilities. Candidates for the position must hold a graduate degree in the biological, behavioral, or social sciences and have had at least five years of teaching, research, or administrative experience. Prior grantmaking experience is not required but will be considered favorably.

Salary commensurate with experience plus fringe benefits. The deadline for receipt of application is April 16, 1993. Qualified candidates should send a letter explaining their interest in the position, résumé, salary requirements, and three letters of reference to:

John T. Bruer, Ph.D., President
James S. McDonnell Foundation
1034 South Brentwood Boulevard, Suite 1610
St. Louis, MO 63117

An Equal Opportunity/Affirmative Action Employer.

HARVARD/POSTDOCTORAL POSITIONS available immediately to study hormonal and developmental control of genes and their function during adipocyte differentiation and lipid biosynthesis. Send curriculum vitae plus 3 references to: Dr. Hei Sook Sul, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSITIONS OPEN

SUPERVISORY OCEANOGRAPHER, OR SUPERVISORY RESEARCH FISHERY BIOLOGIST. The U.S. National Marine Fisheries Service announces a permanent interdisciplinary position. Serves as **CHIEF** of the Pacific Fisheries Environmental Group, Monterey, California and is responsible for research on fishery-environmental interactions with a goal of expanding the ability of fisheries science and management to deal effectively with environmental fluctuations and trends. An essential requirement for the position is experience with the development of environmental databases and time series. Salary: GM-14, \$56,627 to \$73,619, GM-15, \$66,609 to \$86,589 yearly. Application (SF-171 and curriculum vitae) must be received by close of business on March 31, 1993, at: WASC, Personnel Division, 7600 Sand Point Way N.E., Seattle, WA 98115-0070. Enter W/FSC93-177PM on item #1 of SF-171. *Equal Opportunity Employer.*

CHAIRPERSON, DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

The University of Cincinnati College of Medicine announces the opening of the Chair of the Department of **PHYSIOLOGY AND BIOPHYSICS**. The College of Medicine ranks among the top 30 colleges of medicine nationally in grant holdings and has significant interdisciplinary areas of distinction particularly in cell and molecular biology and cardiovascular research. The Department has a long history of excellence in education, training and basic research and the 15 full-time faculty are well supported by extramural grants.

We seek qualified candidates with demonstrated abilities in research, leadership and administration and a strong commitment to teaching. Increased support and growth within the department are expected. Applications from outstanding individuals in any area of physiology and biophysics are welcomed. Individuals able to take advantage of the University's significant investments in the transgenic and gene targeting technologies are particularly encouraged to apply. Applications and nominations are welcomed. Interested individuals should submit curriculum vitae and the names of three references to: Jeffrey Robbins, Chair, Search Committee, c/o Department of Pharmacology and Cell Biophysics, University of Cincinnati, OH 45267-0575.

The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. Women, minorities, disabled persons, Vietnam era and disabled veterans are encouraged to apply.

SUPERVISING PROFESSIONAL ENVIRONMENTAL SCIENTIST

The South Florida Water Management District has a position available for a senior-level scientist to provide strong scientific guidance for the Everglades Nutrient Removal Project, the largest engineered wetlands treatment system in the world. A Ph.D. in wetlands systems ecology with an emphasis on field and laboratory experimentation is preferred along with four years of related experience including two years of supervisory experience.

The District offers competitive salaries, excellent benefits and a smoke-free work environment. After March 1, 1993, all new hires will be required to successfully complete a pre-placement drug test. For consideration send your résumé **INCLUDING YOUR SOCIAL SECURITY NUMBER** to: Human Resources Division Re: SCLS7140, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416.

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

Section of Cardiology, University of Nebraska Medical Center (UNMC), seeks a candidate with Ph.D. in biochemistry or physiology as an **INSTRUCTOR**. Specific projects include investigation into prolonged preservation of hearts from reperfusion injury, separation and analysis of lipoproteins. HPLC experience, enzyme analysis, and NMR, isolated whole organ perfusion.

Curriculum vitae and three references to: Laurence W. V. DeBoer, M.D., UNMC, 600 South 42 Street, Omaha, NE 68198-2265.

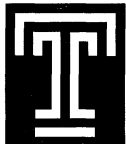
UNMC is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL TRAINING POSITIONS

Postdoctoral research training positions are currently available for recent recipients of Ph.D. and/or M.D. degrees with knowledge and experience in protein biochemistry and/or molecular biology. Training opportunities include but are not limited to the use of biochemical and molecular biological techniques to study the following:

- Structure-function relationships of coagulation proteins
- Enzymology and kinetics of blood coagulation
- Receptor-mediated interactions of coagulation proteins with platelets
- Characterization of intrinsic platelet coagulation proteins and inhibitors
- Characterization of structural domains of coagulation proteins including factors XI, IX, VIII, and X and high molecular weight kininogen

Interested candidates may send correspondence, curriculum vitae, and three letters of reference to: **Peter N. Walsh, M.D., Ph.D., Professor of Medicine, Biochemistry and Thrombosis Research, The Sol Sherry Thrombosis Research Center, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** Temple University School of Medicine is an EOE/AA employer and strongly encourages applications from women and minorities.



Medicinal Chemists Molecular Microbiologists

Microcide Pharmaceuticals, an innovative, new San Francisco Bay Area pharmaceutical company, focused on the discovery and development of novel antimicrobial agents for the treatment and prevention of human infections of bacterial and fungal origin is seeking highly motivated individuals to form state-of-the-art medicinal chemistry and molecular microbiology departments. Openings exist for **Associate Chemists/Biologists** with BS/MS or equivalent, **Post-doctoral Chemists/Biologists**, and **Senior Research Chemists/Biologists** with PhD or equivalent and 2-4 years experience.

This is an exciting opportunity for persons with initiative, flexibility and energy to contribute to a rapid-growth start-up organization. We offer a competitive salary, excellent benefits and equity participation. For immediate consideration please send or fax your resume to: Employment Dept., Microcide Pharmaceuticals, Inc., 4040 Campbell Road, Menlo Park, CA 94025. (415) 856-2760, or call 1-800-795-3502. *An equal opportunity employer.*

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Department of Energy Office of Energy Research Energy Research Financial Assistance Program Notice 93-12: Human Genome Program—Technological Advances

AGENCY: Department of Energy (DOE)
ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications in support of the Human Genome Program. This Program is a coordinated, multidisciplinary, goal oriented, research effort aimed at developing creative, innovative resources and technologies which will lead to a detailed understanding of the human genome at the molecular level. Several research goals are encompassed in this notice, with collaborative, multidisciplinary efforts specifically encouraged. Research will be supported: (1) for development and implementation of mapping resources, cross connecting distinct DNA clone libraries, mapping strategies and automated mapping instrumentation; (2) for advanced DNA sequencing technologies, specifically, innovative instrumentation and automated systems that offer the potential for rapid, cost-effective, large-scale sequencing, and (3) to develop software for use in chromosome mapping and DNA sequencing, and data analysis. Such work may include information retrieval, user interfaces including interfaces compatible with Genome Data Base (GDB), algorithms, software engineering, and data management. Also desired are improved computational resources for analyzing DNA sequences, including identification of homologies, regulatory sites, and protein coding regions.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 15, 1993, to be accepted for merit review in September 1993, and to permit timely consideration for award in Fiscal Year 1994.

ADDRESS: Formal applications referencing Program Notice 93-12 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64, Washington, D.C. 20585, ATTN: Program Notice 93-12. The following address must be used when submitting applications by U.S. Postal Service Express Mail or any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

FOR FURTHER INFORMATION CONTACT: Dr. David A. Smith, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, D.C. 20585, (301) 903-6488.

SUPPLEMENTARY INFORMATION: Potential applicants are strongly encouraged to submit a brief preapplication in accordance with 10 CFR 600.10(d) (2), which consists of two to three pages of narrative describing the research project objectives and methods of accomplishment. These will be reviewed relative to the scope and research needs of the DOE's Human Genome Program. Preapplications referencing Program Notice 93-12 should be received by April 15, 1993, and sent to Dr. David A. Smith, Office of Health and Environmental Research, ER-72 (GTN), Washington, D.C. 20585. Telephone and FAX numbers are required parts of the preapplication. A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt.

It is anticipated that approximately \$5,000,000 will be available for grant awards during FY 1994, contingent upon availability of appropriated funds. Multiple year funding of grant awards is expected, and is also contingent upon availability of funds. Previous awards have ranged from \$79,000 per year up to \$1,000,000 per year with terms from 1 to 3 years. Most awards are in the \$200,000 to \$400,000 per year range for 3 years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the ER Special Research Grants Application Kit and Guide and 10 CFR Part 605. The ER, as part of its grant regulations, requires at 10 CFR 605.11(b) that a grantee funded by ER and performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health "Guidelines for Research Involving Recombinant DNA Molecules" (51 FR 16958, May 7, 1986), or such later revision of those guidelines as may be published in the Federal Register.

The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. The OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research data and materials which may include, where appropriate, putting cell lines, probes, sequence data, etc., into public repositories. Once OHER and the applicant have agreed upon a distribution plan, it will become part of the award conditions. Funds to defray the costs of disseminating materials or submitting data to repositories are allowable; however, such requests must be adequately justified. Applicants should also provide timelines projecting progress toward achieving proposed goals.

The application kit and guide is available from the U.S. Department of Energy, Office of Health and Environmental Research, Office of Energy Research, ER-72, Washington, D.C. 20585. Telephone requests may be made by calling (301) 903-6488. The Catalog of Federal Domestic Assistance Number for this program is 81.049.

Federal Register, Volume 58, Issue 30, pg 8746.

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR—Collaborate with NIH-funded studies of humoral factor(s) affecting cell growth and ion transport in hypertension [see *Circ. Res.* 62, 1001 (1988) and 71, 1143 (1992)]. Applicant should have Ph.D. in biochemistry, pharmacology, or cell biology with postdoctoral training. Experience with cell culture and with chromatographic procedures, including HPLC, necessary. Beginning salary up to \$38,000. Send curriculum vitae by April 30, 1993, to: **H.W. Overbeck, M.D., Ph.D., Departments of Medicine and Physiology, PO Box 9157, West Virginia University Medical Center, Morgantown, WV 26506-9157. Equal Employment Opportunity/Affirmative Action.**

LONGWOOD COLLEGE

CELLULAR/MOLECULAR GENETICIST. The Department of Natural Sciences invites applications for a tenure-track **ASSISTANT PROFESSOR** position to begin August 1993. Ph.D., teaching assistant experience, and background in biochemistry preferred. Teaching at the undergraduate level is the primary focus. Duties include courses in genetics and ethics for majors and in human genetics for nonmajors, together with a general education course. Molecular biology and/or specialty course possible. Some research opportunities available. Send letter of application, curriculum vitae, telephone numbers of three references, and other supportive materials to: **Dr. Carolyn Wells, Employee Relations, 201 High Street, Farmville, VA 23909.** Review begins April 1, 1993. *Women and minorities are encouraged to apply. Equal Opportunity/Affirmative Action Employer. Minority faculty members receive support for completing their terminal degree requirements.*

MICROBIOLOGY

The National College of Chiropractic, Department of Pathology/Microbiology, seeks a Ph.D. microbiologist for a position beginning September 1, 1993. The position requires two or more years of recent teaching experience at University/College or professional level in Microbiology (emphasis in fundamentals). Experience in Bacteriology Lab desirable. Salary commensurate with experience and credentials. The search will be completed when the position is filled. Please send curriculum vitae, the names, addresses and telephone numbers of three references to: **V. H. Vyas, M.D., Chairman, Search Committee, The National College of Chiropractic, 200 East Roosevelt Road, Lombard, IL 60148; Telephone: (708) 268-6539.**

The University of California San Francisco is seeking a scientist for appointment as an **ASSISTANT RESEARCH BIOLOGIST** to be located at San Francisco General Hospital. The successful candidate will be expected to establish and run a molecular and cell biology laboratory to investigate aspects of fetal lung development. Demonstrated research ability and experience with protein biochemistry, molecular and cell biology essential. Please send curriculum vitae to: **Sam Hawgood, M.D., University of California San Francisco, San Francisco, CA 94143-0130. The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION to study mouse T cell activation, with emphasis on calcium signals and protein kinase pathways. Experience required in cell and molecular biology of signal transduction. Send curriculum vitae, and names and telephone numbers of 3 references to: **Richard Miller, M.D., Ph.D., The University of Michigan, Institute of Gerontology, 300 North Ingalls, Ann Arbor, MI 48109-2007.**

A Non-Discriminatory, Affirmative Action Employer.

POSTDOCTORAL POSITION

Available for a motivated biochemist, molecular biologist, or geneticist. A broad range of approaches used to study the regulation and expression of a mammalian gene essential to development and cellular proliferation and to analyze the protein structure and enzymatic functions of the gene's product by site- and cassette-directed mutagenesis. The gene (CAD) encodes a trienzymatic polypeptide involved in pyrimidine biosynthesis. Send curriculum vitae and names of three references to: **Dr. Jeffrey N. Davidson, Department of Microbiology and Immunology, College of Medicine, MS-415 Medical Center, The University of Kentucky, Lexington, KY 40536-0084. The University of Kentucky is an Equal Opportunity Employer, M/F.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN WETLANDS ECOLOGY

The Division of Wetlands Ecology of the Savannah River Ecology Laboratory invites applications for Postdoctoral Fellowships in Wetlands Ecology to participate in collaborative research on the U.S. Department of Energy's Savannah River Site (SRS). The faculty, staff and students of the Wetlands Ecology Division perform primarily field-oriented research including population and community ecology of plants and zooplankton, restoration ecology, ecological statistics, remote sensing/GIS, microbial ecology, and conservation of rare plants. Interesting and innovative suggestions for collaborative efforts are more important than the area of expertise of the applicant.

Applications should include curriculum vitae, a statement of research interests, copies of recent publications, and the names and addresses of 3 references. *Applicants must be U.S. citizens.* Application materials should be mailed to:

**Dr. Gary Wein
Division of Wetlands Ecology
Savannah River Ecology Laboratory
Drawer E.**

Aiken, SC 29802

Telephone: (803) 725-2472 or FAX: (803) 725-3309

The Savannah River Ecology Laboratory is a University of Georgia facility and is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in the Hearing Sciences. The Parmlly Hearing Institute of Loyola University of Chicago has a postdoctoral position (maximum of three years) for a Ph.D., M.D., or Ph.D./M.D. with interests in the Hearing Sciences. The Parmlly Hearing Institute conducts research in areas of auditory perception; psychoacoustics (including human and animal psychophysics); auditory physiology (peripheral and central in fish and chinchilla); and lateral-line behavior, anatomy, and physiology. We are seeking people with interests in these or related areas. Salary will be based on the NIH postdoctoral scale and the job could begin anytime between now and the fall of 1993. Please send a letter expressing your interest in the job, along with curriculum vitae, and two letters of reference to: **William A. Yost, Director, The Parmlly Hearing Institute, Loyola University of Chicago, 6525 North Sheridan Road, Chicago, IL 60626; Telephone: (312) 508-2710; FAX: (312) 508-2719; Email: YPARMLY@LUCCPUA.BITNET. Loyola University of Chicago is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS (two) are available to study (i) gene regulation (*PNAS* 89:10964, 1992) and tissue-specific development using transgenic animals and (ii) structure-function relationship of the component proteins (*JBC* 267: 5128, 1992) of the multienzyme complex in mitochondria. Experience in molecular biology is desirable. Please send curriculum vitae and names of three references to: **Dr. M. S. Patel, State University of New York at Buffalo, Department of Biochemistry, 140 Farber Hall, 3435 Main Street, Buffalo, NY 14214-3000. The State University of New York is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are encouraged to apply.**

POSTDOCTORAL POSITION for neurobiologist or biophysicist. State-of-the-art laboratory using laser scanning confocal microscopy with voltage-sensitive and ion-sensitive dyes to study olfactory neuron function and development. Opportunities for coordinate studies of gene regulation and transduction events. Objectives are to determine receptor mechanisms and the differentiation of odor selective responses in primary olfactory neurons. Send curriculum vitae and names and telephone numbers of three references to: **Robert Gesteland, Ph.D., Department of Anatomy & Cell Biology, University of Cincinnati, Cincinnati, OH 45267-0521. Affirmative Action/Equal Opportunity Employer.**

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

POSITIONS OPEN

DIRECTOR, CHILDREN'S NUTRITION RESEARCH CENTER

A Center Director for the Baylor College of Medicine/United States Department of Agriculture-Agriculture Research Service Children's Nutrition Research Center is sought. The Center is operated under a Cooperative Agreement between the United States Department of Agriculture and the Baylor College of Medicine, Houston, Texas. The Director will be appointed as a full-time faculty member of the Baylor College of Medicine. Candidates for this position should hold an M.D. or an M.D./Ph.D. degree and be board certified in pediatrics. Experience, research productivity and administrative skills must be such that they would be eligible for appointment at the full professorial level at the Baylor College of Medicine. Interested candidates should respond with curriculum vitae to: **Ralph D. Feigin, M.D., Senior Vice President and Chairman, Department of Pediatrics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Equal Opportunity Employer.**

FIELD DIRECTOR, CENTER FOR SUSTAINABLE DEVELOPMENT—COSTA RICA. The School for Field Studies, in conjunction with Northeastern University, seeks an Educator/Administrator with a strong background (including research and teaching) in field-based education. Lead faculty team as they teach case studies, an integrated curriculum addressing sustainable development in relationship with conservation, economics, resource management, ecology and culture. Oversee semester programs (30 students each) and several one-month summer programs. Responsibilities include: supervising faculty, risk management, curriculum development, budgets, logistics and creation of goals for the center. **QUALIFICATIONS:** Ph.D. in environmental education, ecology, resource management, planning or international development; relevant teaching/research experience (preferably in Costa Rica); fluency in Spanish; and ability to work in the field for extended periods under spartan conditions is important. Five years of administrative experience in an equivalent/related position, and 3 years of teaching experience emphasizing curriculum integration and field experience. **TO APPLY:** Send curriculum vitae, and cover letter explaining skills and experience to: **CRFD/S Search, SFS, 16 Broadway, Beverly, MA 01915. Deadline: March 30, 1993.**

RESEARCH MANAGER—BIOLOGICALS

Kemin Industries, Inc., a leading manufacturer of animal feed ingredients, has an immediate opening in its Research and Development Department for a Research Manager who would oversee research on its digestive enzyme additives and edible antimicrobials. The Research Manager will report directly to the Vice President of R&D and will have principal responsibility for the invention of enzyme products to increase the digestibility of animal feeds as well as products to protect feeds from molds and bacterial contamination (e.g., *Salmonella*). Major job functions include direction of laboratory personnel, data interpretation and writing, bench laboratory work on particular enzymatic assays. Preference will be shown to those with previous industrial/supervisory experience and will be especially shown to those with an agricultural background. Job offer is conditional on passing a medical examination including a drug screen. Smoking is prohibited in all buildings. *Kemin Industries is an Equal Opportunity Employer.* Please forward your résumé to: **Dr. C. E. Nelson, Vice President of Research and Development, Box 70, Des Moines, IA 50301.**

FACULTY POSITION IN GENETICS—DUKE UNIVERSITY MEDICAL CENTER invites applications for a faculty position in genetics, with a focus on mammalian or human genetics. This appointment can be made at any level. The research environment is excellent and an extremely attractive and generous package of research support is available. Interested individuals should forward curriculum vitae, statement of research plans, and the names of three referees to: **Dr. Joseph R. Nevins, Section of Genetics, Howard Hughes Medical Institute, Duke University Medical Center, P.O. Box 3054, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**



August 8 – 28, 1993

CELLULAR AND MOLECULAR NEUROBIOLOGY AND DEVELOPMENT OF THE LEECH

This intensive laboratory and lecture course is limited to 12 graduate students, postdoctoral students, and independent investigators interested in applying diverse experimental approaches (electrophysiology, biophysics, cellular and molecular biology) to the study of the nervous system and development of a single organism. Studying the segmental nervous system and embryo of the leech, participants will master a variety of techniques that can be applied to most other preparations, including vertebrates. Principles of signaling and synaptic transmission are examined using intracellular and extracellular recording to characterize individually identified ganglionic neurons. Results are correlated with animal behaviors and with neuronal morphology as revealed by intracellular staining with fluorescent dyes or HRP. Students will also use patch clamp techniques to study whole cell and single channel transmembrane currents in situ and in isolated neurons in culture. Building on the notion that detailed knowledge of the structure and function of the nervous system constitutes a well-defined endpoint for developmental studies, students will also learn techniques and concepts of modern experimental embryology, including lineage tracing, cell cycle analysis and the analysis of gene expression by in situ hybridization and immunohistochemical procedures. **Directors:** *Pierre Drapeau, McGill University and David Weisblat, University of California, Berkeley.*

APPLICATION DEADLINE: **May 15, 1993.**

Tuition: 1,500.

Partial financial will be available to qualified applicants.

Contact: Dorianne Chrysler, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. (508) 548-3705, Ext. 401.

MARINE • BIOLOGICAL • LABORATORY

Postdoctoral Fellowship Neuroimmunology

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has a postdoctoral opening for an immunologist available in September, 1993 in the Neuroscience Division of the Pharmacology Department. Postdoctoral scientists work in a new interdisciplinary environment with PARKE-DAVIS scientists in Biotechnology, Biochemistry, Signal Transduction and Pharmacology.

The successful candidate will join a group exploring the role of cytokines in neurodegenerative diseases having a neuroinflammatory component, e.g., Alzheimer's Disease and Multiple Sclerosis. The work will focus on the regulation of the processing enzyme for interleukin 1-B and the effect of inhibiting this enzyme on the neurodegenerative process. The position requires a Ph.D. in cellular and molecular immunology. Previous training in neuroscience is not required.

Interested persons should submit their curriculum vitae and names of references to Human Resources, Box JDM-86, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"



PARKE-DAVIS
People Who Care

"Equal Opportunity
in Action"

Biochemist/Biochemical Pharmacologist

Assay Development and High Throughput Screening

The field of pharmaceuticals and health care is more rewarding than ever as new products create a healthier world population. As one of the leaders in this dynamic industry, Pfizer Inc., a Fortune 100 company, is committed to continuing its remarkable growth.

In bringing science to life, our international research-based company uses advanced techniques to generate new products, new areas of revenue and career opportunities that self-directed, talented people will find stimulating and rewarding.

The primary R&D facility of Pfizer Inc is located in a southeastern Connecticut shore community, giving easy access to the well known academic and cultural centers of the Northeast, and offers the attractions of a New England lifestyle.

We are seeking a PhD Scientist with a strong background in Biochemistry or Biochemical Pharmacology to play a key role in discovering lead structures in a variety of therapeutic areas. As a member of our Applied Biotechnology group, you will develop and implement high throughput screens designed to identify chemical entities that modulate molecular targets involved in disease etiology. Expertise in devising enzyme, receptor, ion flux and reporter gene assays is required for the position, and experience in high throughput screening is desirable. Strong communication and interpersonal skills are necessary to function as part of a highly interactive team. Candidates with training in molecular or cell biology with a drug discovery orientation will also be considered.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plans, pension plan, relocation assistance and more.

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



Central Research

Bringing science to life.

POSITIONS OPEN



TENURE-TRACK POSITION IN MOLECULAR AND CELLULAR BIOLOGY

The Department of Chemical Immunology at The Weizmann Institute of Science is seeking applicants for a tenure-track faculty position. The appointee is expected to develop an independent research program at the Weizmann Institute of Science. Application, curriculum vitae, academic transcripts, a statement of research interests, and three letters of recommendation should be sent to: **Professor Shmuel Shaltiel, Head, Department of Chemical Immunology, The Weizmann Institute of Science, Rehovot 76100, Israel.**

FACULTY POSITION AVAILABLE IN VASCULAR BIOLOGY

A faculty-level position is available immediately in the Cardiovascular Biology Program at the Oklahoma Medical Research Foundation. The position offers excellent laboratory facilities in a well-equipped new building, and an excellent start-up package. The successful candidate must either currently have, or demonstrate the ability to develop, an independently funded research program in areas related to blood vessel growth and development including atherosclerosis or angiogenesis, blood coagulation, vascular involvement in inflammation, complement or animal models of vascular injury. A willingness to collaborate in a multidisciplinary program is highly desirable. Interested individuals should submit curriculum vitae, a brief description of their research interests and current research funding to: **Dr. Charles Esmon, Cardiovascular Biology, Oklahoma Medical Research Foundation, 825 N.E. 13th Street, Oklahoma City, OK 73104. Equal Opportunity/Affirmative Action Employer.**

OREGON HEALTH SCIENCES UNIVERSITY (OHSU) CENTER FOR RESEARCH ON OCCUPATIONAL AND ENVIRONMENTAL TOXICOLOGY (CROET)

Growing multidisciplinary research institute invites applications for **FACULTY POSITIONS** in molecular toxicology. We seek interactive, team-oriented and, preferably, funded scientists (Ph.D., M.D., D.V.M. with postdoctoral training) focused on chemical perturbations of gene expression in neurodegeneration, aging or carcinogenesis. Start-up funds, competitive salaries (50% state-supported), and generous benefit package. Send curriculum vitae, career goals, one publication and three references by April 2, 1993, to: **Dr. P. Spencer, Director and Senior Scientist, CROET, OHSU, 3181 SW Sam Jackson Park Road, L606, Portland, OR 97201-3098. OHSU is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

A postdoctoral position is available immediately for a highly motivated scientist to study the molecular genetics of potyvirus cell to cell movement. Candidates should possess demonstrated abilities in PCR, complex cloning protocols, site-directed mutagenesis, and *in vitro* transcription and translation. Previous experience with plant viruses desirable but not required. Opportunity for interactions with both university and industrial researchers. Send curriculum vitae and the names of three references to: **Dr. Gary M. Hellmann, Biotechnology Research, Bowman Gray Technical Center, Winston-Salem, NC 27102.**

DOCTORAL PROGRAM IN MOLECULAR & CELLULAR BIOLOGY AND PATHOBIOLOGY. Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$10,000 to \$15,000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

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

FAX NUMBER: 202-682-0816

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

The Department of Biochemistry and Cell Biology announces the availability of a position as postdoctoral research associate in the area of metalloprotein structure and function. Previous experience in one of the following areas is highly desirable: purification and/or characterization of membrane-bound enzymes; electron transfer proteins; biophysical techniques (especially epr). Please provide the names of three individuals who are willing to provide references on behalf of the applicant.

All information should be sent to: **G. Palmer, Department of Biochemistry and Cell Biology, Rice University, P. O. Box 1892, Houston, TX 77251-1892. Rice University is an Equal Opportunity Employer.**

RJ REYNOLDS-UNIVERSITY OF NORTH CAROLINA. POSTDOCTORAL PROGRAM IN HUMAN OLFACTION. Position available immediately to study perceptual, respiratory and electrocortical responses to odorants and irritants in normal, anosmic and unilaterally trigeminoctomized human subjects. Send curriculum vitae and names of references to: **Dr. Donald W. Warren, UNC Craniofacial Center, CB# 7455, Dental Research Center, Chapel Hill, NC 27599-7455. AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER.**

MEDICAL UNIVERSITY OF SOUTH CAROLINA offers programs leading to Ph.D. and M.D./Ph.D. degrees in each of the basic Biomedical Sciences (Anatomy, Biochemistry, Microbiology/Immunology, Pathology, Pharmacology, Physiology), Biostatistics/Epidemiology/Systems Science, Pharmaceutical Sciences, and Molecular & Cellular Biology. Stipends (\$10,000 to \$15,000) available to qualified students. Contact: **College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.**

POSTDOCTORAL POSITION in Genetic Epidemiology of atherosclerosis, diabetes, and hypertension using data on large human and baboon families. Ph.D. in genetic epidemiology or related field required. Send curriculum vitae and the names, addresses and telephone numbers of three references to: **Personnel Manager (311), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147. An Equal Opportunity Employer, M/F/H.**

POSTDOCTORAL POSITION IN ELECTROPHYSIOLOGY of mechanoreceptors and interneurons with a multidisciplinary group working in the overlapping areas of statistical physics, nonlinear dynamics and neurophysiology, supported by the Office of Naval Research. Collaborations, supported by NATO, currently exist with groups at the Italian National Research Council in Pisa and at the Universities of Pisa, Italy and Augsburg, Germany. Competitive salary. Please send curriculum vitae plus three letters of reference to: **Professor Frank Moss, Department of Physics, University of Missouri at St. Louis, St. Louis, MO 63121.**

UNDERGRADUATE TEACHING POSITIONS DEPARTMENT OF BIOLOGICAL SCIENCES COLUMBIA UNIVERSITY

Openings beginning fall semester 1993: (a) one full-time instructor to teach laboratory courses (contemporary biology; cell, molecular and developmental lab); (b) two possible positions for part-time instructors to teach courses in introductory molecular and cellular biology, developmental biology and physiology. Academic year and summer. Likely rank will be **LECTURER** (not tenure-track). Requirements: Ph.D., preferably in areas of cell/molecular/developmental/genetics/physiology; and substantial college-level teaching experience with independent responsibility. Submit curriculum vitae (include telephone number and indicate which position is of interest) and arrange for three reference letters. Priority given to applications received by April 15, 1993. Submit to: **Lecturer Search, 600 Fairchild, Department of Biological Sciences, Columbia University, New York, NY 10027. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to join lab studying cognitive effects of developmental brain damage. Two current NIH-funded projects concern perinatal exposure to cocaine and lead, respectively. Ph.D. required. The preferred candidate will have expertise in the assessment of cognitive functioning in animals, and in statistics. Send curriculum vitae and three letters of recommendation immediately to: **Dr. B. J. Strupp, Associate Professor, Department of Psychology and Division of Nutritional Sciences, Savage Hall, Cornell University, Ithaca, NY 14853. FAX: 607-255-1033, Telephone: 607-255-2694. Equal Opportunity/Affirmative Action Employer.**

United States Department of Agriculture Agriculture Research Service

A **POSTDOCTORAL POSITION** is immediately available to characterize lesions in fish tissue using magnetic resonance imaging (MRI) and spectroscopy (MRS). Candidate is expected to take the lead in applying knowledge of spectroscopic and thermodynamic principles to design magnetic resonance experiments and interpret data from *in vivo* non-invasive procedures. Salary is commensurate with experience (GS-11=\$33,623). Mail or Email or FAX curriculum vitae to: **Dr. George Gassner, Environmental Chemistry Laboratory, USDA/ARS, Building 001 BARC-West, 10300 Baltimore Avenue, Beltsville, MD 20705. EMAIL: GGASSNER@asrr.arsusda.gov; FAX: (301) 504-5993, Voice: (301) 504-5641. Reference all correspondence with 3E004. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION is available for a bacterial geneticist to study fimbrial export and to engineer fimbrial carriers for vaccine development. Experience in molecular techniques (recombinant DNA, mutagenesis, PCR) is required. Send curriculum vitae, description of previous experience and two letters of reference to: **Dr. Dieter M. Schifferli, University of Pennsylvania, Department of Pathobiology, 3800 Spruce Street, Philadelphia, PA 19104-6049; FAX: (215) 898-9923. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

Gladstone Institute of Cardiovascular Disease, University of California, San Francisco. Available immediately in the laboratories of:

Israel F. Charo, M.D., Ph.D.: Research on the roles of cytokines, integrins and herpes viruses in mediating cellular interactions in the vasculature. Methodology includes expression cloning and analysis of novel monocyte receptors in *Xenopus* oocytes, structure/function studies of chemokine induced monocyte binding, and the use of homologous recombination to knock-out genes in mice.

Thomas L. Innerarity, Ph.D.: Study either the mechanism of apo B RNA editing or investigate mutations of apo B that disrupt LDL binding to the LDL receptor.

Robert E. Pitas, Ph.D.: Study the molecular and cellular biology of novel lipoprotein receptors important in atherogenesis. Work will include cloning of receptors, their expression *in vitro*, and studies of receptor specificity. Transgenic models will be used to examine the importance of the receptors in normal physiology and atherogenesis. Candidates should possess a Ph.D. in molecular biology or biochemistry. Experience in molecular biology is required. Competitive salary and benefits. Send curriculum vitae and names of three references to: **Postdoctoral Recruitment/Human Resources, The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco; P.O. Box 419100; San Francisco, CA 94141-9100. Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY. A position is available in a NIH-funded project to study the molecular biology of enveloped RNA viruses. Applicants should have a strong background in molecular techniques and experience in virology is desirable. Please mail or FAX: (414-257-8427) statement of experience, curriculum vitae, and three references to: **Dr. Sidney Grossberg, Department of Microbiology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226-4801. An Equal Opportunity/Affirmative Action Employer, M/F/D.**

DRUG DISCOVERY RESEARCH

CANGENE is a publicly-listed Canadian biotechnology company whose principal activities are the development of biopharmaceutical therapeutics and nucleic acid-based diagnostics. We are expanding our research program leading to a new generation of biopharmaceuticals and are seeking creative Ph.D. Scientists for the following positions:

New Biopharmaceuticals Project Leader

You will establish, direct, and implement a program leading to the discovery of novel therapeutics through the use of receptors. The successful candidate will have a substantial post-graduate background in molecular aspects of cell biology, immunology, or pharmacology. Strong managerial and communication skills are required, along with the proven ability to direct a focused research effort. Experience with the development and implementation of modern drug screening assay procedures is essential. **File #181**

Cell Biologist

You will investigate factors which affect the maintenance of new cell lines to establish novel bioactivity assays. The successful candidate will also establish and operate a cell culture laboratory. A background in mammalian cell transformation and cytokine-receptor signal transduction would be advantageous. **File #182**

Receptor Biochemist

Establishing receptor-ligand binding assays and receptor-specific affinity purification procedures, the successful candidate will have experience with the purification and immobilization of soluble receptors for use in ligand binding assays. A background in the measurement of receptor-to-ligand binding affinities is required. **File #183**

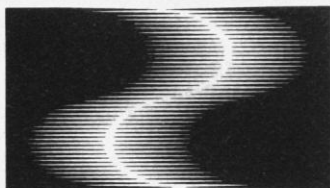
Protein Engineer

As the successful candidate, you will engineer protein therapeutics using affinity screening methods. Experience with bacteriophage display library screening or a related methodology is required. A background in the interactions of cell-surface receptors with their ligands would be advantageous. **File #184**

We offer a competitive salary and compensation package including moving expenses and participation in our equity program. We also offer you the opportunity of working in close proximity to the world-class city of Toronto, Canada, one of the fastest growing and most beautiful cities in North America. You are invited to apply, in strictest confidence, by sending your C.V. and the names of three references, quoting the appropriate file number, to: **Manager, Human Resources, CANGENE CORPORATION, 3403 American Drive, Mississauga, Ontario L4V 1T4 Canada Fax: (416) 673-5123**



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Senior Scientists, Postdoctoral Fellows
and Technicians

Myriad Genetics, Inc. is a biotechnology company focused on isolation of human genes that cause disease. Myriad is expanding its gene isolation and diagnostic groups and will explore therapeutic areas in the future. Company facilities are located in Research Park adjacent to the University of Utah. Myriad offers a competitive compensation package, a stock option package, and a highly stimulating, interactive environment. Positions are available immediately for **technicians** with experience in molecular biology and for **postdoctoral and senior scientists** with strong backgrounds in molecular biology, informatics, and/or genomic research. Please send a C.V. and letter of interest outlining your area of expertise to: Dr. Alexander Kamb, Director, Genome Laboratory, Myriad Genetics, Inc., 417 Wakara Way, Salt Lake City, Utah 84108.



Innovation & Efficiency

Using innovation to improve the efficiency of molecular biology research products has been the cornerstone of Stratagene's development since our founding in 1984. With more than 200 employees and 500 products, Stratagene is now seeking Technical Sales Representatives for the Chicago and Houston areas.

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These positions represent a unique opportunity for qualified and experienced individuals to participate in a growing technical sales organization. One position will service the Midwest territory (base location is Chicago area) and the other position will service the South Central territory (base location is Houston area). Both positions are available immediately and other positions will be opening in the near future.

Candidates should have strong practical experience in Molecular Biology or related field. Prior sales experience is beneficial. Sales Representatives will attend an extensive training program at our beautiful coastal location in La Jolla, California.

Stratagene offers an excellent company benefits package, including a 401(K) Plan, and a competitive salary and incentive program. All qualified candidates forward resume of qualifications indicating area of interest to: **Stratagene, Attn: Professional Staffing, 11099 N. Torrey Pines Rd., La Jolla, CA 92037. AA/EOE.**



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Requirements include an MS or PhD in Chemistry and a minimum of 5 years' analytical experience, including the analysis of drugs in physiologic fluids. *Job Code 9309.*

Analytical Chemists (BS/MS)

Requirements include proficiency in HPLC, capillary electrophoresis, and other state-of-the-art analytical methodologies, plus a minimum of 2 years' related experience. *Job Code 9310.*

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Requirements include a strong synthetic chemistry background. Pharmaceutical industrial experience desired. *Job Code 9301.*

Pharmacologists — Drug Metabolism and Delivery

Requirements include a BS or MS plus experience with *in vitro* and *in vivo* pharmacology research. *Job Code 9317.*

Molecular Biologists / Biochemists

BS/MS-level Scientists with a minimum of 2 years' laboratory experience possessing exceptional technical skills in molecular biology, protein biochemistry, cell biology, or enzymology. *Job Code 9314.*

Protein Separation Scientists

BS/MS-level Biochemists with 2+ years' industrial experience in protein purification and characterization for the clinical production of recombinant proteins. GMP experience desired. *Job Code 9244.*

Our beautiful Torrey Pines location places us in the midst of academic and institutional research excellence, as well as the area's expanding biotech industry. We offer competitive compensation packages and more importantly, a highly interactive and stimulating scientific environment. For consideration please send a CV and a letter of interest referencing the *job code number* above to: Corvas International, Inc., Human Resources, 3030 Science Park Road, San Diego, CA 92121. Equal Opportunity Employer.

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Immediate opening for a senior tenured or a junior tenure track position in a newly formed interdepartmental Molecular Medicine Program. Rank will be commensurate with ability and experience. The appointment will be in one of the basic science departments. The laboratories for the Program are housed in a new building that contains approximately 80,000 square feet of modern research space. Core facilities for tissue-culture, media preparation, DNA synthesis, protein sequencing and peptide synthesis, fluorescence-activated cell sorting, and transgenic mice are available. The position will be highly competitive with regard to start-up funds, laboratory space, and salary.

The Program seeks an individual of outstanding research potential in the areas of cellular or molecular biology. Potential areas of interest include, but are not limited to, cell and molecular mechanisms of morphogenesis, differentiation, or senescence.

Applicants should send a curriculum vitae, statement of research interests, and three letters of reference to:

Dr. Fredric Fay, Search Committee Chairman
or

Dr. Michael P. Czech, Director
Program in Molecular Medicine
University of Massachusetts Medical Center
373 Plantation St.
Worcester, MA 01605

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Located in a new facility outside of Washington, D.C., the Institute is located near a wide variety of government, private and academic scientific laboratories. We offer an excellent compensation and benefits package. Qualified candidates should forward a resume to:



Gillette Research Institute
401 Professional Drive
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PROFESSOR AND CHAIR DIVISION OF MEDICINAL CHEMISTRY AND NATURAL PRODUCTS SCHOOL OF PHARMACY UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The School of Pharmacy of the University of North Carolina at Chapel Hill (UNC-CH) seeks applications and nominations for the position of Professor and Chair of the Division of Medicinal Chemistry and Natural Products. The successful candidate will provide leadership to enhance and strengthen the undergraduate and graduate teaching and research programs of the Division. Candidates should have a Ph.D. in medicinal or pharmaceutical chemistry or related discipline in the biomedical sciences appropriate to the research and teaching activities of the Division. In addition, an established and current record of extramural funding, administrative and leadership skills, and a commitment to scholarly achievement are required.

The Division of Medicinal Chemistry, one of four divisions in the School of Pharmacy, currently includes 10 tenure-track faculty with 30 graduate and postdoctoral students engaging in M.S. and Ph.D. research programs focusing on neuroscience, cancer chemotherapy, virology, molecular modeling, lipid chemistry, and natural products. The School of Pharmacy is part of the Division of Health Affairs, consisting of the Schools of Medicine, Public Health, Dentistry, and Nursing. The UNC-CH campus is located near Research Triangle Park, which includes several major pharmaceutical and biotechnology companies, with which the School maintains close affiliations.

The Search Committee will continue to receive nominations and applications until the individual is identified. Applications should contain a brief statement of research and academic objectives, a curriculum vitae, and names of three references. Applications and nominations should be addressed to:

Richard G. Hiskey, Ph.D.
Chair, Search Committee for Medicinal Chemistry Chairperson
School of Pharmacy, CB #7360
University of North Carolina
Chapel Hill, NC 27599-7360

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BROOKHAVEN NATIONAL LABORATORY

Protein Data Bank Senior Project Manager

Brookhaven National Laboratory (BNL) is seeking to fill the position of Senior Project Manager of the Protein Data Bank (PDB). The PDB, located in the BNL Chemistry Department, is a unique international database resource for 3-D structures of biological macromolecules. The PDB Senior Project Manager will have broad responsibilities including supervision of the acquisition, storage and dissemination of information between the database and its diverse scientific and technical user communities. He or she will also serve as a spokesperson to the scientific community for the PDB.

The Senior Project Manager will hold a Scientific Staff Appointment at a level commensurate with his or her experience and qualifications. The individual selected should have a strong background in structural biology/biochemistry with broad knowledge of database technologies and the use of databases for the storage of complex 3-D molecular structure data. The Senior Project Manager should also be interested in the scientific usage of the information in the PDB database and will be expected to provide intellectual leadership, to have an informed vision of the PDB's future goals, and to assist in forging close links with PDB collaborators.

Nominations should be submitted as soon as possible, and applicants should send a curriculum vitae and the names of three references by June 1, 1993, to: Chairman, PDB Search Committee, Chemistry Department, Brookhaven National Laboratory, Upton, Long Island, New York 11973. Equal Opportunity Employer M/F/D/V.



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Dennis Loh - T cell development and cell death.
Marion Peters - Immunoregulation of T and B lymphocytes in the gut.
Robert Schreiber - Interferon- γ and tumor necrosis factor.
Matt Thomas - Cellular regulation by protein tyrosine phosphatases; lymphocyte activation.
Emil Unanue - Antigen processing and presentations.

For additional information please write to Division of Biology and Biomedical Sciences, Department MJ, Campus Box 8226, 660 S. Euclid Ave., St. Louis, MO 63110-1093.

TEMPLE UNIVERSITY SCHOOL OF MEDICINE

The Department of Microbiology and Immunology invites applications for several tenure-track Faculty positions at the Assistant Professor, Associate Professor or Professor level, as part of a major expansion. We are particularly interested in molecular immunologists or cellular immunologists employing contemporary molecular biology approaches. The successful candidates will be expected to have significant research accomplishments, ability to establish and maintain a vigorous research program that will attract peer-reviewed funding and a commitment to excellence in educating graduate and medical students. Applicants at the Associate Professor or Professor level should demonstrate a consistent record of independent peer-reviewed funding and should have active competitive grants. Start up funds and newly renovated space are available for the appointed investigators.

The Department of Microbiology and Immunology at present consists of 18 full-time faculty members that are supported by extensive peer-reviewed funding and several joint appointees. The Department has an extremely strong graduate program providing students with advanced training in molecular microbiology and immunology. Interactions are encouraged with other basic and clinical departments and both the Fels Institute for Cancer Research and the Thrombosis Center of Temple University School of Medicine.

Interested individuals should send a curriculum vitae, bibliography, a summary of research achievements and research plans and names and addresses of four references to: **Chris D. Platsoucas, Ph.D., Professor and Chairperson, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** Temple University is committed to Affirmative Action/Equal Employment Opportunity and strongly encourages applications from women and minorities.



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POSTDOCTORAL POSITION. Available immediately to study signal transduction mechanisms during aging, and regulation of bone signaling pathways by cytokines. Experience in adenylate cyclase and phosphoinositide turnover pathways, cell and molecular biology desired. Send curriculum vitae and names of three references to: **Dr. Michael S. Katz, GRECC (182), Audie L. Murphy Memorial Veterans Hospital, 7400 Merton Minter Boulevard, San Antonio, TX 78284. An Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH POSITIONS Duke University Medical Center

Postdoctoral research positions (Ph.D. or M.D.) are available to study lung cell biology. Emphasis is on techniques that will assess cell function and responses *in vivo*. Projects involve the role of oxidants and antioxidants in airway inflammation and reactive airway diseases, the regulation of cell enzyme systems that generate reactive oxygen species, the regulation of matrix proteins and extracellular mechanisms of cell signaling. Applicants should have a background in cell biology or related fields and experience in molecular biology, immunocytochemistry and/or *in situ* hybridization. Send curriculum vitae and names of three references to: **Dr. James D. Crapo, 3177, Division of Pulmonary Medicine, Duke University, Durham, NC 27710.**

POSTDOCTORAL POSITION IN SIGNAL TRANSDUCTION RESEARCH: Available immediately to investigate G-protein signaling mechanisms during cell growth and differentiation. Recent Ph.D. with strong background and research experience in molecular biology and protein chemistry is preferred. Send curriculum vitae and three reference letters to: **Dr. Danny N. Dhanasekaran, Temple University School of Medicine, Fels Institute, 3307 North Broad Street, Philadelphia, PA 19140. Equal Opportunity Employer.**

POSTDOCTORAL POSITION AVAILABLE. Immediate opening for M.D., Ph.D. or D.V.M. in the Nephrology Research Unit and the Departments of Medicine, Biochemistry and Molecular Biology. Laboratory is involved in research in the following areas: vasopressin receptor biochemistry and molecular biology and vitamin D and calcium physiology and biochemistry. Position is supported by an NIH Training Grant. *Candidates must be U.S. citizens or holders of an Immigration Visa to the United States.* Reply to: **Dr. R. Kumar, Nephrology Research Unit, 911A Guggenheim, Mayo Clinic/Foundation, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.**

POSTGRADUATE POSITIONS in chemistry and chemistry-related fields available at national laboratories including those of the Department of Energy and the Environmental Protection Agency. Must have recent graduate degree. *U.S. citizenship may be required for some laboratories.* For application material: **Postgraduate Research Program, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117, Telephone: (615) 576-3456.**

TWO POSTDOCTORAL POSITIONS In Macromolecular Crystallography CELLULAR BIOCHEMISTRY & BIOPHYSICS PROGRAM MEMORIAL SLOAN-KETTERING CANCER CENTER

The Structural Biology laboratory focusing on oncogene products and tumor suppressor proteins has two postdoctoral positions available immediately. Successful applicants will assume ongoing projects aimed at determining the crystal structures of (1) a p53 tumor suppressor protein-DNA complex, and (2) a complex of p53 with an oncogene product. The preferred candidate will be highly motivated and have experience in macromolecular crystallography and biochemistry. Candidates with experience in small molecule crystallography or candidates with interest in structural biology will also be considered and are encouraged to apply. Send curriculum vitae and names of three references to: **Dr. Nicola P. Pavletich, Memorial Sloan-Kettering Cancer Center, Box 576, 1275 York Avenue, New York, NY 10021. FAX: 212-717-3627. An Equal Opportunity Employer, M/F/D/V.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Position available immediately to study regulation of penicillin-binding proteins in *Bacillus subtilis*. Experience in microbiology and molecular biology required. Send curriculum vitae and names of three references to: **Dr. C. Buchanan, Department of Biological Sciences, Southern Methodist University, Dallas, TX 75275. Equal Opportunity/Affirmative Action Employer.**

RETINAL CELL/MOLECULAR BIOLOGIST

A **POSTDOCTORAL POSITION** is available immediately to study the cellular and molecular basis of retinal regeneration in adult urodele amphibians with an emphasis on induction and cellular differentiation. Experience in molecular biology, protein chemistry and monoclonal antibody technology preferred.

RETINAL ELECTROPHYSIOLOGIST

A **POSTDOCTORAL POSITION** is available immediately to study the electrophysiological properties of retinal neurons from amphibians or primates with an emphasis on the formation of synaptic networks in low density cell culture. Experience in optical imaging and intracellular recording techniques preferred.

Send curriculum vitae, summary of relevant experience, representative publications and the names of three references by April 15th, 1993, to: **Peter R. MacLeish, Ph.D., Professor and Director of Research, The Margaret M. Dyson Vision Research Institute, Department of Ophthalmology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.**

NMR SPECTROSCOPY

The Cardiovascular Institute at Columbia University seeks applicants with an M.D. or Ph.D. degree and 1 to 2 years of postdoctoral experience in NMR spectroscopy with interest in becoming involved in studies of perfused hearts and isolated cardiac myocytes. Expertise with NMR studies of *in vitro* systems is especially desirable. Our current interests are in pursuing multinuclear spectroscopy including proton, sodium and phosphorus. In addition the candidate will have the opportunity to become involved in multinuclear MR imaging. This is primarily a research position with no clinical responsibilities. Please send curriculum vitae, a reprint of a key publication and the names of two references to: **Dr. Jose Katz, Division of Cardiology, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.**

NEUROSCIENCE

POSTDOCTORAL POSITION available immediately for research on physiology and pharmacology of limbic structures in animal model of drug dependence. Projects comprise *in vivo* and *in vitro* electrophysiological techniques including voltammetry. Applicants are expected to have a background in electrophysiology. Please send curriculum vitae and names of three references to: **Dr. G. ten Bruggencate, Professor and Chairman, Department of Physiology, University of Munich, Pettenkoferstr. 12, D-W-8000 München 2, Germany; FAX: 089-5996-216.**

POSTDOCTORAL POSITION available immediately to study the molecular basis of virus-host cell interaction. NIH-funded projects focus on parainfluenza virus biology, with emphasis on the mechanism of virus-induced cell fusion. Candidates with a strong background in molecular/cell biology preferred. Please send curriculum vitae and names of three references to: **Dr. Anne Moscona, Departments of Cell Biology/Anatomy and Pediatrics, Box 1198, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

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

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POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to join a multidisciplinary drug discovery group. Research involves indirect mapping of active sites of protein kinases by studying the ability of synthetic peptides to act as inhibitors and/or substrates. Experience with enzymes and an interest in structure-function relationships required. Salary dependent upon experience. Excellent fringe benefits. Send curriculum vitae and references to: **Ray Budde, Department of NeuroOncology, Box 100, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.**

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Laboratory of Retrovirus Research, Division of Virology, CBER, FDA (on NIH campus): STAFF FELLOW (Postdoctoral) or SENIOR STAFF FELLOW positions to study molecular aspects of HIV-1 viral-cell interactions, and anti-HIV immunity and vaccine development. Applicants with Ph.D. or M.D. degrees and experience in the areas of molecular immunology or molecular Virology of HIV infections, send applications to: **Dr. Hana Golding, Chief, Laboratory of Retrovirus Research, Division of Virology, CBER, FDA, Building 29A Room 2C22, 8800 Rockville Pike, Bethesda, MD 20892. Telephone: 301-496-2426. FAX: 301-496-1810.**

CLINICAL CHEMISTRY POSTDOCTORAL FELLOWSHIPS at Mayo Clinic. Seeking applicants for two-year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1993, will be considered for appointment beginning July 1994. Contact: **Mary F. Burritt, Ph.D., Division of Clinical Biochemistry, Mayo Clinic, Rochester, MN 55905** for more information. *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

POSTDOCTORAL FELLOW: A position is available immediately for a postdoctoral fellow to participate in studies using *in situ* hybridization to explore human vascular disease. The goal of these studies is to define factor(s) synthesized locally in the vessel wall which contribute to inflammation, thrombosis, smooth muscle differentiation and/or proliferation in atherosclerosis and post-angioplasty restenosis. Previous experience in molecular biology, pathology, and/or cell biology is desirable. Send curriculum vitae and names of three references to: **Dr. Josiah N. Wilcox, Drawer AJ, Department of Medicine, Emory University, Atlanta, GA 30322. We are an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

Fellowships available to residents of North America with Ph.D., M.D., or comparable degree and less than one year of postdoctoral laboratory experience by application date for beginning training in basic biomedical research. The three-year award consists of a stipend of \$25,000 per year for each of the three years; \$2,000 per annum research allowance; travel to fellowship location; annual meeting. Application deadline August 15, 1993; fellowships activate following July. For application forms, write or telephone: **The Helen Hay Whitney Foundation, 450 East 63rd Street, New York, NY 10021; Telephone: 212-751-8228, or FAX: 212-688-6794.**

POSTDOCTORAL FELLOW—Neuroscience/Pharmacology: A position is available immediately for a postdoctoral fellow to participate in pharmacogenetic studies using selective breeding methods for developing mouse lines that are sensitive to barbiturates. The project includes correlative behavioral and neurochemical characterization of the lines as they develop. Methodology includes HPLC, GC, RIA and RNA measures for neurochemical turnover studies of brain transmitters. Previous experience in analytical, molecular biological, and/or behavioral measures is preferred. Please send curriculum vitae and names of three references to: **Carlton K. Erickson, Ph.D., College of Pharmacy, Institute for Neuroscience, University of Texas, Austin, TX 78712-1074.**

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RESEARCH SCIENTIST CELL BIOLOGY

To design and implement cell-based models for testing novel therapeutics and drug delivery strategies. Requires a Ph.D. in Biochemistry, Cell Biology or equivalent and at least 2 years postdoctoral experience, including work with mammalian cell cultures. Expertise in one or more of the following would be advantageous: growth and differentiation factors, inflammation research, receptor binding and signalling processes, and transcytotic transport mechanisms. **Reply to Box DJK/CB.**

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Requirements for this position include a Ph.D. in immunology or biochemistry and up to three years of postdoctoral training. Documentation of accomplishments via publication in peer-reviewed journals and excellent communication skills are required.

PARKE-DAVIS offers an excellent compensation program and comprehensive benefits package. Qualified applicants should submit their curriculum vitae, a brief summary of their research interests, and a list of three references, in confidence to **Box JDM-92274, Human Resources, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"**



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Assistant Research Professor (Rank II) Desert Research Institute Energy and Environmental Engineering Center Reno, NV

Duties include the development of sampling, analytical and data analysis methods for organic atmospheric pollutants; participation in field measurement programs; microcomputer-based analysis of air quality and meteorological data; written preparation of journal articles, reports and research proposals; presentations before professional societies and sponsoring agencies; and teaching of courses in atmospheric and analytical chemistry.

Requires recent doctoral degree in Environmental Science and/or Chemistry from a recognized academic program. Air pollution research experience in field monitoring, laboratory analysis, data processing, and data analysis with an emphasis on GC/MS/FID applications. Demonstrable high skills in written and oral communications and in college-level teaching are essential. A record of previous publications and presentations, and successful proposal preparation is desirable.

Salary is competitive. The Desert Research Institute offers an excellent benefits package. Review of applications begins April 26, 1993. The position will remain open until a suitable applicant is identified. Position is located in Reno, Nevada.

Submit curriculum vitae, letter of application and names, addresses and telephone numbers of three references to: Recruitment Office, Desert Research Institute, University & Community College System of Nevada, P.O. Box 19040, Las Vegas, NV 89132-0040. AA/EOE

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Symposium Director: Kamal Rashid Symposium Chair: C. Robert Matthews
Contact: Pat Phillips, Penn State Biotechnology Institute, 519C Wartik Lab, University Park, PA 16802, 814-863-3650. Posters/abstracts due 5/28/93.

Plant Molecular Biologists

ICI Seeds Inc. in Slater, Iowa is seeking two individuals with an interest in the application of molecular biology techniques to crop improvement. These positions are funded for three years as part of a collaborative project between US-AID, Michigan State University, ICI Seeds and the Central Research Institute for Food Crops in Indonesia. A primary objective of the project is the generation of insect-resistant corn germplasm, suitable for commercialization in Indonesia. The successful candidates will join a team of three Indonesian postdoctoral scientists. This team will be based at the ICI Seeds Research Center near Ames, Iowa, and will interact with researchers who are engaged in applying state-of-the-art cell and molecular biology to crop improvement programs. Travel to Indonesia will be required. One position is for a post-doctoral scientist to serve as team leader. The other position is for a researcher with a BS/MS in Plant Sciences and interest in plant transformation who will report to the team leader. Please send a letter of interest which expresses your goals, background and experience; a resume; and three letters of reference to Dr Martin Wilson, Cell Biology Project Leader, Research Department, ICI Seeds, Inc., Hwy. 210 West, Box 500, Slater, Iowa 50244, USA.



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FOOD AND DRUG ADMINISTRATION

CHEMISTS

The Food and Drug Administration's Center for Drug Evaluation and Research (CDER) will be recruiting for Chemists at the American Chemical Society Employment Clearinghouse being held March 28 through April 2, 1993 at the Colorado Convention Center. Chemists at CDER serve on a multidisciplinary team of scientific professionals and perform such duties as review and evaluate new drug applications dealing with chemical components; evaluate the adequacy of the methods, facilities, and controls used for the manufacture of drugs, review proposed labels, summarize findings and make recommendations for approval or non-approval of the applications. The Center for Biologics Evaluation and Research (CBER) is also recruiting for chemists or scientists in related disciplines to participate in the development and approval process for biological products. CBER chemists also serve as reviewers on multidisciplinary scientific teams. Some positions offer the unique opportunity to conduct biomedical research in combination with review responsibilities. These positions have a high degree of independence and involve complex scientific and regulatory issues.

QUALIFICATIONS: These positions require specific course work in the field of study and professional experience or directly related postgraduate education. Experience in the development, manufacture or testing of drugs and/or antibiotics is desired.

Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. Candidates for Staff Fellowships may be either U.S. citizens or resident aliens eligible for citizenship within four years.

SALARY: Civil Service salary range for GS-12 through GS-13 is \$40,298 - \$62,293. Salary, benefits, and level of responsibility are commensurate with education and experience. Positions may also be filled by appointment in the U.S. Public Health Service, Commissioned Corps with commensurate salary and benefits.

HOW TO APPLY: If you are interested in either position, submit detailed Curriculum Vitae or Application for Federal Employment (SF-171) and a copy of college transcripts to:

DHHS/PHS/Food and Drug Administration

Center for Drug
Evaluation and Research
5600 Fishers Lane
Room 6B-05; HFD-20
Rockville, MD 20857
Attn: Rhonda S. Alderman

Center for Biologics
Evaluation and Research
1401 Rockville Pike
Suite 200N; HFM-1
Rockville, MD 20852-1448
Attn: Dorothy Boyer (CHEM)

FDA IS AN EQUAL OPPORTUNITY EMPLOYER AND HAS A SMOKE FREE WORKPLACE

POSITIONS OPEN

JOINT GRADUATE PROGRAM IN TOXICOLOGY, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY AND THE UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY/ROBERT WOOD JOHNSON MEDICAL SCHOOL. We are engaged in a national search for **POSTDOCTORAL FELLOWS** who are interested in Toxicology. Our faculty will provide an opportunity for you to do research in carcinogenesis, mutagenesis, teratogenesis, toxicology of solvents and metals, biochemical mechanisms of toxicity, environmental toxicology, toxicology of the nervous system, the immune system, liver, bone marrow and skin, metabolism of chemicals and the application of molecular biological techniques to toxicology. We strive to couple the results of basic toxicological research with modern approaches to risk assessment. The Program is based in the new Environmental and Occupational Health Sciences Institute, which is devoted to studies covering a broad range of environmental issues. For complete information please send your résumé to: **Dr. Robert Snyder, Director, Joint Graduate Program in Toxicology, Environmental and Occupational Health Sciences Institute, 681 Frelinghuysen Road, Piscataway, NJ 08855-1179, or call (908) 932-0215.**

POSTDOCTORAL FELLOW/TOXICOLOGY

We seek a Ph.D. in chemistry, biochemistry or related field who desires training in Biochemical/Environmental Toxicology in an active, growing multidisciplinary toxicology program. The project consists of characterization of metabolites and DNA adducts of xenobiotics by standard methods and ^{32}P -postlabeling. Experience in organic synthesis is highly desirable. Please send curriculum vitae, and arrange for three letters of recommendation to be sent by April 30, 1993, to: **Dr. Larry W. Robertson, Graduate Center for Toxicology, 206 Funkhouser Building, University of Kentucky, Lexington, KY 40506-0054, FAX: (606) 258-1059.** Salary is \$19,000 to \$27,000 depending on qualifications and experience. *This NIH-sponsored traineeship is open to U.S. citizens and permanent residents. The University of Kentucky is an Equal Opportunity University.*

POSTDOCTORAL, RESEARCH ASSOCIATE, OR RESEARCH ASSISTANT PROFESSOR positions are available to work on: (1) the molecular cloning and identification of tumor-specific antigens in human malignant melanoma or ovarian carcinoma; (2) isolation and characterization of tumor-specific peptides; (3) molecular characterization of T-cell antigen receptors that involve antitumor immunity or autoimmune diseases. Experience in molecular cloning and expression systems, methods of peptide purification and/or immunobiology of human T cells is needed. Positions supported by NIH research grants. Interested candidates should send curriculum vitae, bibliography, and names and addresses of three references to: **Chris D. Platsoucas, Ph.D., Professor and Chairperson, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** Temple University is committed to Affirmative Action/Equal Employment Opportunity and strongly encourages applications from women and minorities.

POSTDOCTORAL RESEARCH ASSOCIATE, Brookhaven National Laboratory. The Biology Department has a position available for a recent Ph.D. with a background in molecular biology and knowledge of genetics, biochemistry and microbiology. Experience with microbiological methods is desirable.

The successful candidate will participate in a research program to (1) investigate the regulation of genetic expression of restriction enzyme systems and biochemical characterization of the endonucleases and methylases, including structural studies of the interaction of these proteins with DNA; or (2) study DNA mismatch repair in *Streptococcus pneumoniae* and other organisms, and related processes of mutagenesis, recombination, and genetic transformation.

Candidates may apply by sending curriculum vitae, publications list, and names of three references to: **Dr. Sanford A. Lacks, Biology Department, Building 463, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973.** Equal Opportunity Employer, M/F/D/V.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE POSITION available immediately. Preference will be given to an experienced electrophysiologist to work on retinal slices using whole-cell recording techniques, studying glutamate receptors, nitric oxide. Send curriculum vitae, a brief statement of research interest and experience and the names and telephone numbers of three references to: **Dr. Robert Miller, Department of Physiology, 6-255 Millard Hall, 435 Delaware Street SE, University of Minnesota, Minneapolis, MN 55455.** The University of Minnesota is an Equal Opportunity Educator and Employer.

A POSTDOCTORAL RESEARCH ASSOCIATE position is available for a recent Ph.D. graduate to study molecular mechanisms controlling cell cycle and cell death processes in neoplastic cells. Applicants should have a strong background in molecular biology techniques including cloning, directed mutagenesis, and use of retroviral vectors. Send curriculum vitae with names of three references to: **Dr. J. Houghton, Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE to conduct independent research on the transport processes of pollutant gases and aerosols within the human respiratory tract, through both theoretical and experimental analyses utilizing models and human volunteers. Requires Ph.D. in Chemical, Mechanical or Environmental Engineering, with thesis or postgraduate research in the area of fluid flow and aerosol dynamics modeling and experiments as they are applied to investigations of ozone uptake by human airways and particle deposition in the human lung. As demonstrated by publications and references, applicant must have proficiency in techniques involving measurements and analysis of gas uptake and aerosol deposition in the respiratory system. A strong background in mathematical and numerical modeling is required.

Send curriculum vitae, transcripts and three letters of reference to: **Dr. Philip A. Bromberg, Director, Center for Environmental Medicine, Medical Research Building C, University of North Carolina at Chapel Hill, Campus Box #7310, Chapel Hill, NC 27599.**

RESEARCH CHEMIST

The Department of Clinical Investigation, Walter Reed Army Medical Center, is seeking candidates for a grant-funded position not to exceed two years, to perform or participate in all phases of research studying regulation of vitamin D receptor in human breast cancer cells. This position is classified as GS-12, \$40,298 per annum. Candidates must have knowledge of molecular biology and biochemical techniques including skill in techniques such as isolation of messenger DNA, Northern and Southern blot hybridization, and polymerase chain reactions; knowledge of use of radioisotopes binding assays, sterol purification, cell culture and standard laboratory techniques. Applicant must submit SF-171, Application for Federal Employment, which can be obtained from, and is to be returned to: **Civilian Personnel Office, Nancy Slatery, Walter Reed Army Medical Center, Washington, DC 20307-5001; Telephone: (202) 576-2724/5.** Walter Reed Army Medical Center is an Equal Opportunity Employer.

DEPARTMENT OF VETERANS AFFAIRS VETERANS HEALTH ADMINISTRATION HEALTH SCIENCE SPECIALIST

Medical Research Service, Department of Veterans Affairs (VA) is recruiting for the position of Health Science Specialist in the Program Review Division. The Health Science Specialist will function as an Executive Secretary to several Merit Review Boards that provide the scientific peer review of research proposals submitted by VA investigators. Candidates must have a Ph.D. degree or equivalent and should have biomedical research experience. Applicants should send recent curriculum vitae and a letter summarizing research and administrative experience to: **Chief, Program Review Division (12A6), VA Central Office, 810 Vermont Avenue, NW, Washington, DC 20420.** For further information, contact: **LeRoy Frey, Ph.D. at (202) 523-5942.** VA is an Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE/POSTDOCTORAL ASSOCIATE/INSTRUCTOR with background in biochemistry, pharmacology, or cell biology to study neurotransmitter interactions with signal transduction/growth factors/receptors in brain. Please send curriculum vitae to: **Donald J. Reis, M.D., Division of Neurobiology, Cornell University Medical College, 411 East 69th Street—KB410, New York, NY 10021.** Equal Opportunity Employer/Affirmative Action/M/F/H/V.

RESEARCH ASSOCIATE to conduct independent research in the area of liposome delivery systems and pharmacology of new anticancer agents and perform *in vitro* studies to include design, performance, and evaluation of cytotoxicity, cellular pharmacology, and assessment of mechanisms of cytotoxicity with new anticancer agents, and *in vivo* studies to include design, performance, and evaluation of antitumor activity, toxicity, pharmacokinetics and drug metabolism. Master's in Pharmacology with 4 years of experience to include research in pharmacology of anticancer drugs and evidence of 5 publications in peer-reviewed journal (at least 3, first authored) in the area of pharmacology of anticancer drugs. \$30,000 annual salary; 40 hours per week. Apply at the Texas Employment Commission, Houston, Texas or send résumé to: **Texas Employment Commission, TEC Building, Austin, TX 78778, J. O. #6735235.** Ad Paid by an Equal Employment Opportunity Employer.

COLUMBIA UNIVERSITY ASSOCIATE RESEARCH SCIENTIST POSITION IN HUMAN MOLECULAR GENETICS

Applications are invited for an Associate Research Scientist to join our group working on the development of a method for identification of transcribed sequences in genomic DNA and its application to gene mapping of human chromosome 13. The post is available immediately. Applicant must have a strong background in molecular biology and Ph.D. in related area. Experience in cDNA selection techniques, library construction and DNA sequencing will be advantageous. Position is funded for a period of 3 years. Salary and fringe benefits are excellent. *Equal Opportunity/Affirmative Action Employer.*

Please address inquiries plus curriculum vitae and letters of recommendation to: **Dr. Marcelo Bento Soares, Department of Psychiatry, Columbia University, 722 West 168th Street, Unit #41, New York, NY 10032.**

Cooperative Extension ASSISTANT/ASSOCIATE/FULL SPECIALIST (CE) and ASSISTANT/ASSOCIATE/FULL ENOLOGIST/FERMENTATION SCIENTIST in the Agricultural Experiment Station (AES). Applications are sought for an 11-month position available July 1, 1993. The appointee is expected to carry out a program of CE education and applied research in wine making or fermentation science relevant to her/his area of expertise, to have a commitment to both the extension and applied research aspects of the position, to develop a strong and highly visible statewide program to extend relevant information to winery and fermentation industry personnel, wine industry suppliers and the public as needed, and will be expected to interact with members of allied departments. Sensitivity to affirmative action and performance in furthering its policy are required. Requires a Ph.D. in Biochemistry, Chemical Engineering, Chemistry, Food Science, Microbiology, or a related field. Extension and/or postdoctoral research experience is desirable. Send curriculum vitae, publication list, extension and research publications, graduate transcripts, a statement of research, extension, and teaching interests, and the names and addresses of three references by May 1, 1993, to: **Roger B. Boulton, Search Committee Chair, Department of Viticulture and Enology, University of California, Davis, CA 95616-8749, Telephone: (916) 752-0900 or 752-0296.**

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

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

FAX NUMBER: 202-682-0816



(University of London)
Queen Square, London WC1N 3BG

SOBELL CHAIR OF NEUROPHYSIOLOGY

The Institute of Neurology seeks a successor to Professor T A Sears, who retires on 30th September 1993, for the established University Chair of Neurophysiology. The Institute is a member of the British Postgraduate Medical Federation of the University of London and, with its associated special hospital, the National Hospital for Neurology and Neurosurgery, has an international reputation for basic and applied research in the Neurosciences.

Applications for the Chair are now invited from scientists (medical or non-medical) with proven achievements in research in the general field of Neurophysiology. Further particulars of the post may be obtained from the Dean's office at the above address (fax: 071-278 5069), or by telephone to the Dean, Professor D N Landon (071-837 3611, ext. 4148), to whom applications (10 copies, with a full curriculum vitae, list of publications and the names of 3 referees) should be sent by Friday, April 30th 1993.



VISION RESEARCH AT THE New England Eye Center Tufts University School of Medicine



The New England Eye Center is a multi-discipline research and clinical department, based at the New England Medical Center. The center is recruiting investigators to work in our fully equipped, state-of-the-art Vision Science Laboratories. These newly constructed facilities include 14,000 square feet at the New England Medical Center and Tufts University School of Medicine campus in Boston.

Many full-time faculty positions are available at the level of ASSISTANT, ASSOCIATE or FULL PROFESSOR. All positions require a Ph.D. or M.D. Research support guarantees and joint appointments with basic science departments may be arranged. Current independent funding is highly desirable and established investigators will have priority. All candidates must demonstrate an interest in collaborative research at the basic and clinical level; interaction with other investigators on the Health Sciences Campus is encouraged and expected. Previous experience in vision research is not necessary. Salary and benefits are highly competitive.

MOLECULAR BIOLOGISTS: Experience is required in molecular cloning, sequencing, and expression. Opportunities exist for collaborations in tumor biology, immunology, virology, many areas of cell biology. The laboratories are fully equipped for molecular biology research including DNA synthesizer and sequencer, and abundant ancillary equipment.

CELL BIOLOGISTS: Research expertise in cell biology and biochemistry is necessary. Joint appointments in Biochemistry, Immunology, or Anatomy may be arranged. Candidates may wish to join ongoing programs in wound healing, adhesion molecule expression and regulation, and laser-tissue interaction.

IMMUNOLOGISTS: Individuals with interests in cellular or molecular immunology are encouraged to apply. A candidate may either wish to collaborate on current projects investigating autoimmunity, regulation of cytokine and receptor expression, antigen presentation, and viral immunity, or develop an independent research program.

PHARMACOLOGISTS/PHYSIOLOGISTS: The New England Eye Center wishes to expand its research program in physiology and drug development. Candidates with an interest in regulation of angiogenesis, blood and aqueous humor dynamics, cataractogenesis, and macular degeneration are encouraged to apply. Other research interests are welcome.

Interested applicants should send a curriculum vitae, cover letter describing research interests, and names and phone numbers of three references to: Michael B. Raizman, M.D., Director of Research, New England Eye Center, Tufts University School of Medicine, 750 Washington St., Boston, MA 02111.



NATIONAL UNIVERSITY OF SINGAPORE DEPARTMENT OF BOTANY

Applications are invited for teaching appointments in the **Department of Botany**.

Candidates should have a PhD degree and who are trained in one or more of

the following areas in *plant sciences*: molecular biology, biotechnology, recombinant DNA-technology, gene transfer systems, molecular genetics, biochemistry, physiology, developmental botany, morphogenesis and plant pathology.

Besides appointments on normal 3-year contracts, visiting appointments for one or two years will also be considered.

Gross annual emoluments range as follows:

Lecturer	S\$50,390– 64,200
Senior Lecturer	S\$58,680–100,310
Associate Professor	S\$88,650–122,870
(US\$1.00 = S\$1.64 approximately)	

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance of S\$1,000 or S\$2,000, subsidised housing, education allowance for up to three children subject to a maximum of S\$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

The Department of Botany is a department in the Faculty of Science. Facilities for teaching and research in the Department are excellent. These include well-equipped research laboratories for plant tissue culture, mycology and plant pathology, molecular biology, ecophysiology, electron microscopy and a herbarium.

All academic staff have access to the following computer and telecommunication resources: an individual microcomputer (an IBM AT-compatible or Apple Macintosh); an IBM mainframe computer with 16 MIPS of computing power; an NEC SX supercomputer with 650 MFLOPS of computing power; departmental laser printers; a wide spectrum of mainframe and microcomputer software; voice-mail. A campus-wide network, which is based on the high speed optical fibre based FDDI technology, links up all the academic staff and student microcomputers, UNIX workstations and provides access to the mainframe computer, the supercomputer, UNIX hosts, the on-library catalogue, CD-ROM databases, Televue, Internet and BITNET.

Application forms and further information on terms and conditions of service may be obtained from:

**The Director
Personnel Department
National University of Singapore
10 Kent Ridge Crescent
Singapore 0511**

**The Director
North America Office
National University of Singapore
55 East 59th Street
New York, N.Y. 10022, U.S.A.
Tel: (212) 751-0331**

Enquiries may also be sent through **BITNET** to: **PERPL @ NUS3090**, or through **Telefax: (65) 7783948**

POSITIONS OPEN

UNM Department of Neurology has an immediate opening for a **RESEARCH ASSOCIATE/STAFF I**. This position requires a Ph.D. in a scientific area. Familiarity and experience with tissue culture of neurons and glia cells, molecular pharmacology of glutamate receptors in neurons and glial, flow cytometric analysis of excitability using cell sorter and voltage sensitive dyes and immunocytochemistry in tissue sections and electromicroscopy. Refer to requisition #132-93B. Application deadline is April 16, 1993. Apply to: **UNM Medical Center Human Resources, North Campus, Building 2, Room 101, Albuquerque, NM 87131**. Résumés must be accompanied by a cover letter with an original signature. *Equal Opportunity Employer.*

CLINICAL INVESTIGATORS, MAYO CLINIC/FOUNDATION. Two recently approved additional clinical investigator faculty positions. Candidates should be NIH-funded clinical investigators whose research requires the resources of a clinical research center. Attractive package of salary, benefits and research support provided. A new NIH-funded clinical research center will open late fall 1993. Please send curriculum vitae in confidence to: **Hugh C. Smith, M.D., Room 1602W, Mayo Clinic, Rochester, MN 55905**. *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

RESEARCH SCIENTIST THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

The Ohio State University College of Medicine is seeking an outstanding senior scientist. This person must have received national and international recognition as a leader in either clinical or basic biomedical research, and currently have a vigorously active research program. This person must be capable of qualifying for an appointment as a tenured professor in one of the academic departments. There will be generous start-up funds and research space, and appropriate academic appointments for associates within the research group may be available. The salary will be highly competitive. While applications from all disciplines will be accepted for review, special preference will be given to applicants who are cancer researchers.

This person will be expected to sustain a major ongoing research and training program supported by extramural funds, and to develop new research initiatives. Applicants must also be willing to collaborate in multidisciplinary programs, and serve in capacities which will benefit the research endeavors of the College of Medicine as a whole.

Applicants should send complete curriculum vitae, arrange for four letters of recommendation, and a statement of research interests to: **Dr. Ronald Glaser, Associate Dean for Research and Graduate Education, The Ohio State University College of Medicine, 218 Meiling Hall, 370 West 9th Avenue, Columbus, OH 43210**.

The Ohio State University and the College of Medicine are committed to the ideals of Affirmative Action and Equal Employment Opportunity.

SUPERVISORY HEALTH SCIENTIST CENTERS FOR DISEASE CONTROL

The Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, are currently seeking applications for two supervisory health scientists, GM-601-14/15, to serve as experts in the evaluation of clinical and public health laboratory standards and practices. The area of responsibility for the first position is to oversee special projects related to clinical laboratory quality improvement such as the development of a laboratory surveillance network and the second position is the collection and evaluation of data on laboratory practices and performance. Applicants must have experience in (1) clinical or public health laboratory testing, (2) practices and procedures designed to improve the quality of laboratory testing, and (3) designing scientific studies, collecting data and analyzing the findings. Starting salary for GM-601-14 = \$56,627, and GM-601-15 = \$66,609 per year and does not require any previous federal work experience.

CDC is an Equal Opportunity Employer and provides a smoke-free work environment.

For additional information and forms, contact the CDC Employment Information Service at (404) 639-3616. Refer to announcements number (1) **CST2DE93065** and (2) **CST2DE93056**.

POSITIONS OPEN

POLYMER CHEMIST

A rapidly growing elastomer technology company involved in developing and manufacturing polyurethanes and polyurethane products is seeking a polymer chemist to support company and customer sponsored research and development programs. The ideal applicant will be highly motivated and will have a B.S. or M.S. in Chemistry. This applicant must have at least five years of experience in polymer chemistry, with a minimum of two years of experience formulating polyurethane elastomers. Responsibilities will include developing new and unique polyurethane formulations, and conducting laboratory experiments in support of new product development activities. Excellent benefits and working conditions. Ideal location near Winchester, Virginia, 75 miles west of Washington, D.C. *Candidates must be U.S. citizens.* Please send résumé to:

**Seaward International, Inc.
3470 Martinsburg Pike
Clearbrook, VA 22624
Attn: David P. Lewis**

An Equal Opportunity Employer.

PEDIATRIC GENETICIST—UMDNJ—Robert Wood Johnson Medical School Department of Pediatrics seeks a new faculty member in Pediatric Genetics who combines knowledge of clinical genetics with scholarly activity. Faculty rank commensurate with qualifications. Should be board certified in Pediatrics. Letter of interest and curriculum vitae with bibliography should be sent to: **David H. Carver, M.D., Professor and Chairman, Department of Pediatrics, UMDNJ-RWJMS, 1 Robert Wood Johnson Place, CN 19, New Brunswick, NJ 08903-0019**. *UMDNJ, New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.*

UMD New Jersey

DEVELOPMENTAL/MOLECULAR TOXICOLOGIST

The Division of Reproductive and Developmental Toxicology at FDA's National Center for Toxicological Research (NCTR) has an opening for a **STAFF SCIENTIST**. Ongoing research in this Division is concentrated on the adverse developmental effects of a variety of chemicals. NCTR is seeking a molecular biologist interested in applying this knowledge to developmental toxicology. Resources for research are provided by NCTR. The opening is a civil service research scientist position at the GS-12/13 (\$40,298 to \$62,293) level. Basic qualifications require an appropriate degree (or equivalent combination of education and experience.) A Ph.D. or equivalent is desired. The candidate will have to undergo a peer review of qualifications and accomplishments for determination of grade level. Positions may also be filled by staff fellows with commensurate salary and benefits. Send résumé and letter outlining research interests to: **Daniel M. Sheehan, Acting Director, Division of Reproductive and Developmental Toxicology, NCTR, Jefferson, AR 72079**. Telephone: (501) 543-7475. *U.S. citizenship required. Applications accepted through May 1, 1993. DHHS/PHS/FDA/NCTR is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are especially encouraged to apply. FDA is a smoke-free environment.*

The Biotechnology Patent Examining Group of the Patent and Trademark Office is currently recruiting scientists for positions as **PATENT EXAMINERS**. Individuals with advanced degrees and/or equivalent experience in the fields of immunology, molecular biology, gene therapy, transgenic animals, animal science, biochemistry, protein engineering and microbiology are urged to send a résumé or SF-171 to the following address:

**Patent and Trademark Office
Office of Personnel
Box 171
Washington, DC 20231
K. Clark (180)**

For further information, call (703) 308-1123. *U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.*

POSITIONS OPEN

SENIOR SCIENTIST

Ecologist/environmental scientist needed to synoptically and experimentally determine nutrient thresholds that cause freshwater wetland community change, nutrient imbalance and ecological stress in the Florida Everglades. Prefer macrophyte physiologist interested in land-use runoff problems, plant/soil interactions, nutrient dynamics and ecosystem modeling, but will consider anyone with knowledge of wetland/estuarine processes. Minimum qualifications are M.S. in ecology or environmental science and four years of experience. Preferred qualifications include a Ph.D. in wetland ecology.

The District offers competitive salaries, excellent benefits and a smoke-free work environment. After March 1, 1993, all new hires will be required to successfully complete a pre-placement drug test. For consideration, contact: **Fred Sklar at the South Florida Water Management District, Everglades Systems Research Division at (407) 687-6504** or send your résumé INCLUDING YOUR SOCIAL SECURITY NUMBER to: **Human Resources Division Re: SCL57140, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416**.

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

GENETIC EPIDEMIOLOGIST FOR NATIONAL HIGH RISK REGISTRY. This is a registry of individuals with multiple family members with cancer. Over 15,000 pedigrees are registered and kept current.

The successful candidate will be expected to establish an independent research program, as well as collaborate with multispecialty members of the Strang-Cornell research team. The applicant must have an appropriate Ph.D. and two or more years of relevant postdoctoral experience. University appointment according to applicant's eligibility. Send résumé to: **Dr. D.G. Miller, Strang Cancer Prevention Center, 428 East 72nd Street, New York, NY 10021**.

STOCKTON STATE COLLEGE

ENGINEERING GEOLOGY. One-year appointment. **VISITING SPECIALIST** in Engineering Geology/Geological Engineering/Geotechnical Engineering. Will teach mineralogy, petrology and other geology courses, as appropriate, and assist in developing an undergraduate engineering geology program. This position requires significant non-academic experience in the broad area of geotechnical engineering. A visiting specialist is recognized as having achieved distinction in her/his chosen area. Salary commensurate with experience. Screening begins March 26, 1993. Send letter of application, résumé, three letters of recommendation, and evidence of completion of highest degree to: **Dr. Barbara Byrne, Dean of Natural Sciences and Mathematics, Stockton State College, AA29, Pomona, NJ 08240**. *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. R303108.*

ASSISTANT COLLECTION MANAGERS

ATCC needs 2 individuals seeking career advancement in a world-renowned culture collection of diversified microorganisms.

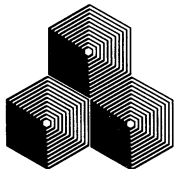
(1)—M.S./Ph.D. or equivalent experience in systematic mycology and experience in fungi/yeast culture characterization and identification required. Knowledge of medical and industrial mycology, fungal physiology and genetics, molecular biology, biochemistry and culture collection management systems and techniques desirable. Will enlarge and maintain collection of fungi/yeasts; ensure collection meets current and future international standards; develop method of coding strain data for computers.

(2)—M.S./Ph.D. or equivalent experience. Knowledge of systematic bacteriology, molecular biology techniques and some computer experience in analyzing taxonomic data. Will enlarge, maintain and authenticate by biochemical and molecular methods the world's most comprehensive collection of bacteria. Ensure collection meets current and international standards. Analyze data of bacteria collection.

Send curriculum vitae:

**ATCC/ACM
12301 Parklawn Drive
Rockville, MD 20852**

Equal Opportunity Employer.



PARADIGM

Strategic Approaches in Biopharmaceuticals

Paradigm Biosciences, Inc., a biopharmaceutical company based in Salt Lake City, Utah, is expanding its research and product development. The Company is focused on the treatment and prevention of immunologic disorders that accompany aging and trauma. Other areas of interest include thrombosis, inflammation, wound healing and pharmacologic modification of immune function. Paradigm offers exciting career opportunities for scientists interested in the development of pharmaceuticals that control the endogenous production of cytokines by lymphocytes and other cell types. Present expansion is targeted at Ph.D. and M.D. level professionals with strong research background in the following areas: **Immunobiology, Cell Biology, Medicinal Chemistry, Molecular Endocrinology, and Steroid Biochemistry.**

Company laboratories are located in Research Park adjacent to the University of Utah. Paradigm offers a competitive compensation package, stock options, and a highly interactive, motivating scientific environment. Please send a C.V. and letter of interest outlining your area of expertise to: Paradigm Biosciences, Inc., Research and Development Section, 417 Wakara Way, Suite 285, Salt Lake City, Utah 84108.



ANNOUNCING A POSITION OF DIRECTOR OF RESEARCH

The International Centre for Research in Agroforestry (ICRAF) is an international research organisation supported by the Consultative Group on International Agricultural Research (CGIAR). Its ultimate purpose is to help mitigate tropical deforestation, land depletion and rural poverty through the better use of trees and shrubs in crop and livestock production systems in humid, sub-humid and semi-arid tropics.

The Director of Research oversees ICRAF's Research Division which is composed of four programmes: Characterization and Impact; Multipurpose Tree Improvement; Component Interactions, and Systems Improvement, plus a small research support unit. Research activities are conducted in 13 countries in Africa and at new sites in Latin America and Asia. Current resources include a multidisciplinary team of 42 senior scientists, support staff and an annual research budget of approximately US\$ 10 million.

The Director of Research reports to the Director General and has responsibility for planning and implementing ICRAF's research programme. The Director of Research will foster a culture characterised by high scientific standards, a sense of mission, participatory decision making, delegation of authority with responsibility, nurturing professional growth and commitment to ICRAF's ultimate purpose. In addition, as a key member of ICRAF's senior management team, he or she will be actively involved in the overall guidance of the Centre.

Duties will involve implementing ICRAF's strategy and mid-term plan and modifying them as appropriate; administering an efficient research management system, and preparing proposals for donor agencies. The successful candidate must have a PhD degree or equivalent and be an internationally recognised scientist in a field related to agroforestry. In addition he or she must have a keen research instinct, deep understanding of the role of trees in sustainable agriculture, be an effective manager, an independent problem solver, a team player, a good writer, motivator and communicator. Fluency in English is essential, a working knowledge of Spanish or French is highly desirable.

Salary and perquisites are highly competitive. Benefits include housing and education allowances, annual home leave, personal car and an excellent retirement and health insurance package. The position will be based at ICRAF's headquarters in Nairobi, Kenya. ICRAF offers a collegial and gender-sensitive working environment. Initial appointment is for two years, renewable with satisfactory performance.

Applicants are invited to send a detailed curriculum vitae, including date of birth, salary details and the names and addresses of three references (including telephone and tax numbers). Nominations from individuals or organizations are also welcome. All correspondence should be addressed to the Director General, International Centre for Research in Agroforestry, P. O. Box 30677, Nairobi, Kenya Tel: (254-2) 521450; E-Mail: CG1354; Fax: (254-2) 521001.

Applications will be considered until 30 June, 1993 or until the position is filled. Women are particularly encouraged to apply.

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Postdoctoral Research Fellow Neuroscience Pharmacology

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company in Ann Arbor, Michigan seeks a Postdoctoral Research Fellow for a two-year assignment in the Neuroscience Pharmacology unit. In addition to a Ph.D. in Biochemistry/Molecular Pharmacology, the successful candidate will have a basic interest in signal transduction and a background involving molecular biology and biochemistry. Experience in transgenic mouse or embryonic stem cell/homologous recombination techniques for gene knockout experiments is preferred, but not essential.

Interested individuals should submit their CV and list of references to **Box JDM-80, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. Smoke-Free Work Environment**



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Positions are available in our research and development groups to explore methods of probe assay improvement. Areas of interest include: analytical chemistry, magnetic particle chemistry, hybridization kinetics, and the investigation of alternative buffers, detergents, and chaotropes. We require a Ph.D. in biochemistry, molecular biology, or chemistry and two to five years' postdoctoral or equivalent experience. Strong publication record required.

RESEARCH ASSOCIATES

Several associate positions are available for researchers with a BS degree and two or more years of industrial or research experience. Areas of interest include: DNA hybridization, probe-based assay development, analytical chemistry, DNA synthesis, and HPLC.

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Requires experience in functional aspects of macrophage and neutrophil activities. Involves ongoing studies investigating the mechanism of action of carbohydrate-based immunomodulators, as they relate to anti-microbial activity. Five years' post-doctoral experience required; 2-3 years' industry experience helpful.

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JOIN OUR FAMILY

RESEARCH SCIENTIST

Saint Francis Campus

Saint Francis Hospital and Medical Center located in Hartford, Connecticut, is seeking candidates to join our Department of Research to establish new programs in cell and molecular biology. Candidates should have completed a doctoral degree and a postdoctoral fellowship and have prior experience in molecular aspects of cell biology. Candidates will be eligible for an appointment at the University of Connecticut School of Medicine. Interested candidates should send resume and references to:

Dr. Ernesto Canalis, Saint Francis Hospital and Medical Center, 114 Woodland St., Hartford, Connecticut 06105-1299, Fax: (203) 548-5415



UNIVERSITY OF OXFORD

In association with Linacre College and Keble College

UNIVERSITY LECTURESHIP IN GEOCHEMISTRY

Applications are invited for the post of University Lecturer in Geochemistry in the Department of Earth Sciences. The post is available from 1 October 1993. It will be held in conjunction with a Fellowship at Linacre College and a Senior College Lectureship at Keble College. Applicants may have experience in any field of geochemistry and related disciplines, and will be expected to take part in a full range of departmental teaching duties. New experimental facilities are likely to be available. The university stipend will be according to age on a scale which is currently £13,400-£26,407 per annum. Details of the additional duties and emoluments associated with the senior college lectureship are given in the further particulars. These may be obtained from Professor J.D.C. McConnell, Department of Earth Sciences, Parks Road, Oxford, OX1 3PR (Tel. 0865-272000, Fax 0865-272072) to whom applications (six copies except in the case of overseas applicants from whom only one is required) should be sent by 30 April 1993. The application should include a curriculum vitae, list of publications, details of teaching experience, a statement of research interests and the names and addresses of three referees.

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ENDOWED CHAIR

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

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

NEUROIMMUNOLOGY RESEARCH AT UCSF

Postdoctoral positions available to study neuropeptide receptors, peptide processing enzymes and cytokines in normal and inflamed tissues. All positions require a higher degree (Ph.D. or equivalent).

Molecular Biologist: Experience required in standard molecular techniques including cloning, expression and mutagenesis of receptors and proteases.

Cell Physiologist: Experience required in analysis of signal transduction pathways, FACS analysis, microscopy.

Anatomist: Experience required in localization and characterization of neuropeptides/receptors/proteases by immunohistochemistry, in situ hybridization, and autoradiography. Experience in electron microscopy and confocal microscopy desirable.

Send c.v.'s, representative publications, statement of research interests, and names and addresses of three referees to:

**N.W. Bunnett/D.G. Payan, Box 0660,
Department of Surgery
UCSF, 521 Parnassus Avenue,
San Francisco, CA 94143.**

THE NATIONAL RESEARCH COUNCIL ANNOUNCES

POSTDOCTORAL & SENIOR RESEARCH ASSOCIATESHIP AWARDS

The awards sponsored by the National Research Council are available at the U.S. Army Institute of Dental Research. The mission of this program is to develop "ready-to-use" products which can be directly implanted in osseous defects to induce bone regeneration *in situ*. The research opportunities include physiology and biochemistry of bone regeneration with emphasis on the engineering of predictably degrading bone-regenerating systems and the application of polymer chemistry/microencapsulation to the development of time-release delivery systems for bone inductive proteins and growth factors. Doctoral degree in life sciences or biomedical sciences is required. Annual stipend for recent graduates is \$32,400 and is appropriately higher for those with more than 5 years of experience. Support for relocation and funds for professional travel are available, and a health insurance program is offered. Awards are for 1 year with possible renewals to a total of 3.

For further information contact:

Dr. Anshumali Chaudhari at (301) 621-0765 or (410) 677-2279
or Dr. Jeffrey Hollinger at (202) 576-3764.

Their mailing address is:

U.S. Army Institute of Dental Research
Building T-2832
Fort G.G. Meade, MD 20755-5305

Applications must be filed directly with the NRC. For application materials, contact:



Associateship Programs (GR 430/SDR)
NATIONAL RESEARCH COUNCIL
2101 Constitution Avenue, NW
Washington, D.C. 20418
FAX: (202) 334-2759

Applications must be submitted to the NRC by April 15 or August 15

GLOBAL *Deputy* CHANGE *Executive* *Director*

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

The Royal Swedish Academy of Sciences invites applications for the position of Deputy Executive Director of the International Geosphere-Biosphere Programme (IGBP), from 1 September 1993. The IGBP is an internationally coordinated research effort, dealing with the causes and effects of global environmental change. Current projects address atmospheric chemistry, the ocean carbon cycle, coastal zone interactions, terrestrial ecosystems, ecological hydrology and past global changes. Integrated modelling work is also ongoing, together with the development of data systems and monitoring, and regional research and training.

The Deputy Executive Director will be responsible for

- liaison with IGBP core projects and the science community
- support of the IGBP Scientific Committee
- representation of the IGBP at meetings
- editing of reports and other publications
- assisting the Executive Director in guiding the work of the Secretariat

The successful candidate will

- have a PhD in a relevant scientific field
- have proven interest in global environmental change research
- be well acquainted with international scientific collaboration, including organizational and policy aspects
- be fluent in written and spoken English; knowledge of other languages is an advantage

The Deputy Executive Director is based in Stockholm, Sweden. The minimum contract period is two years, with the possibility of an extension. The salary is paid in SKR and based on that of a senior scientist in Sweden.

Letters of application describing past relevant experience, with a curriculum vitae and the names of three referees, should be sent no later than 1 May 1993 to the IGBP Secretariat, The Royal Swedish Academy of Sciences, Box 50005, S-10405 Stockholm, Sweden; fax +46 8 166405, tel +46 8 166448.

Senior Faculty Position Molecular Virology

The University of Michigan, Ann Arbor

As a part of the expansion of research and teaching in the area of Virology at The University of Michigan. We are seeking a creative scientist with experience in the study of viruses to fill a senior level, tenure-track position in the Department of Microbiology and Immunology. Our current interests encompass viral entry into cells, oncogenic transformation, and regulation of gene expression. Although we are particularly interested in senior candidates in these areas, outstanding applicants at any level studying viruses as pathogens or as model systems will be considered. Senior candidates must have a record of a successful independent research program, and junior candidates must be prepared to establish such a program. The appointee will also be expected to participate in the teaching programs for graduate, medical, and dental students.

Applications should include a curriculum vitae, bibliography, a brief statement of research interests, and the names of three individuals familiar with the candidate's research and teaching abilities. Applications should be submitted by May 15, 1993 to: **Virology Search Committee, Department of Microbiology and Immunology, The University of Michigan, 6643 Medical Science Building II, Ann Arbor, MI 48109-0620.** The University of Michigan is an Equal Opportunity/Affirmative Action Employer and encourages the application of qualified women and minorities.



The University of Michigan

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POSITIONS OPEN

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Activated Cell Therapy, Inc., a recently formed biotechnology company located near Stanford University, is developing living cell therapies for the treatment of cancer and chronic infections. We are currently recruiting for several positions including:

SCIENTIST/SENIOR SCIENTIST—Supervise cellular immunology group. Experience with generation and analysis of cytotoxic T cells, manipulation and culture of human T cells, flow cytometry, and antigen presentation. Ph.D. or M.D. required.

SCIENTIST/SENIOR SCIENTIST—Supervise laboratory isolating and manipulating human bone marrow cells for clinical trials. Experience with tumor cell purging, hematopoiesis assays, separation/depletion of leukocyte subsets. Ph.D. or M.D. required.

LAB MANAGER/SUPERVISOR—Experience with separation of lymphocyte subsets, immunostaining and flow cytometry, assays of lymphocyte function and hematopoiesis. Ph.D. and/or medical technician license desirable but not required.

SCIENTIST/TISSUE CULTURE ENGINEER—Experience with mammalian cell culture, including long-term lymphocyte propagation, and hollow fiber or other scale-up techniques.

Activated Cell Therapy offers a competitive salary and benefits package, including stock options. If you enjoy a team-oriented environment and would like to have an impact on the development of a new class of human therapeutics, please send a copy of your résumé and recent salary history to:

Activated Cell Therapy, Inc.
c/o Pennie & Edmonds
2730 Sand Hill Road
Menlo Park, CA 94025

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BIOCHEMIST/BIOLOGIST. One-year full-time position begins September 16, 1993, at University of Minnesota, Morris. Duties: teach undergraduate biochemistry and microbiology plus either immunology or another biology course. Research and service activities also expected. Minimum qualifications: ABD in biochemistry/biology and two years of teaching experience. (Graduate teaching experience acceptable.) Strong commitment to undergraduate teaching desired. Ph.D. preferred. Send letter, résumé, transcripts and three reference letters to: **Dr. M. Korth, Chair, Division of Science and Math, University of Minnesota, Morris, MN 56267-2128** to arrive by April 16, 1993. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

RESEARCH SCIENTIST position available to examine geographic patterns of **AQUATIC BIODIVERSITY** in Virginia. Will use existing data to examine relationships between basin and landscape features and fish and mussel diversity. Ph.D. (or equivalent) in aquatic or landscape ecology, conservation biology, or ichthyology required.

Experience with geographic information systems and multivariate statistics desirable. Ability to work independently and publish essential. \$25,000 to \$28,000 salary for first year. Send curriculum vitae and 3 references by 15 April 1993 to: **Paul Angermeier, Department of Fisheries and Wildlife Sciences, Virginia Tech, Blacksburg, VA 24061-0321.** *An Affirmative Action/Equal Opportunity Employer.*

ANNOUNCEMENTS

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

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

COURSES AND TRAINING

NINTH ANNUAL SOMATIC CELL AND MOLECULAR GENETICS WORKSHOP July 11-24, 1993

This course provides a combined somatic cell and molecular biology workshop experience, designed to provide an intensive "hands-on" introduction to the methodology and concepts of current molecular biology procedures. The content of this workshop also provides the basic techniques needed for researchers interested in initiating genome mapping studies. Application Deadline: March 31, 1993. A per diem stipend is provided. Applicants should submit a letter describing how the workshop will assist their current research, along with curriculum vitae that lists publications (no abstracts) for the past five years only, to: **Peggy J. Woodson, Somatic Cell & Molecular Genetics Workshop, Eleanor Roosevelt Institute, 1899 Gaylord Street, Denver, CO 80206, Telephone: (303) 333-4515.** Registration fee: \$200. Please **DO NOT** send registration fee at this time. *The Eleanor Roosevelt Institute is an Equal Opportunity/Affirmative Action Institution and invites and encourages applications from women and minorities. Open to U.S. Citizens and Permanent Residents only.*

MEETINGS

SECOND INTERNATIONAL CONFERENCE ON ANCIENT DNA SMITHSONIAN INSTITUTION

October 7-9, 1993, Washington D.C. Focus on the role of museums and natural history collections in ancient DNA research. **Registration deadline is May 1, 1993.** For more information contact: **Ancient DNA Conference Secretary, LMS, Smithsonian, MRC 534, MSC, Washington, DC 20560. Telephone: 301-238-3444. E-mail: oldDNA@onyx.si.edu.**

FIFTH INTERNATIONAL CONFERENCE ON CRYSTALLIZATION OF BIOLOGICAL MACROMOLECULES Catamaran Hotel, San Diego, California August 8-13, 1993

Focus: establishing a new emphasis in rational crystallization of macromolecules by integrating molecular biology, biophysics and biochemistry.

MEMBRANE PROTEIN CRYSTALLIZATION WORKSHOP (HARTMUT MICHEL)

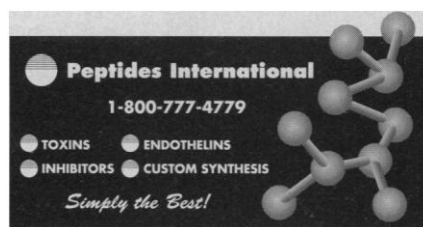
Abstract deadline: March 30, 1993. Information from/abstracts to:

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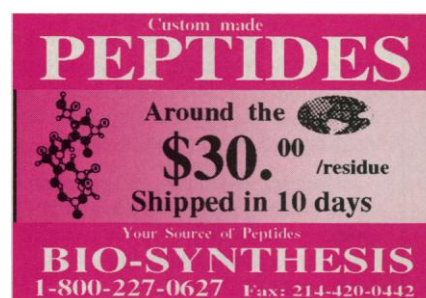
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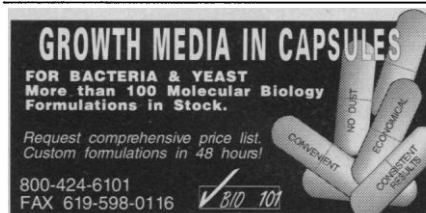
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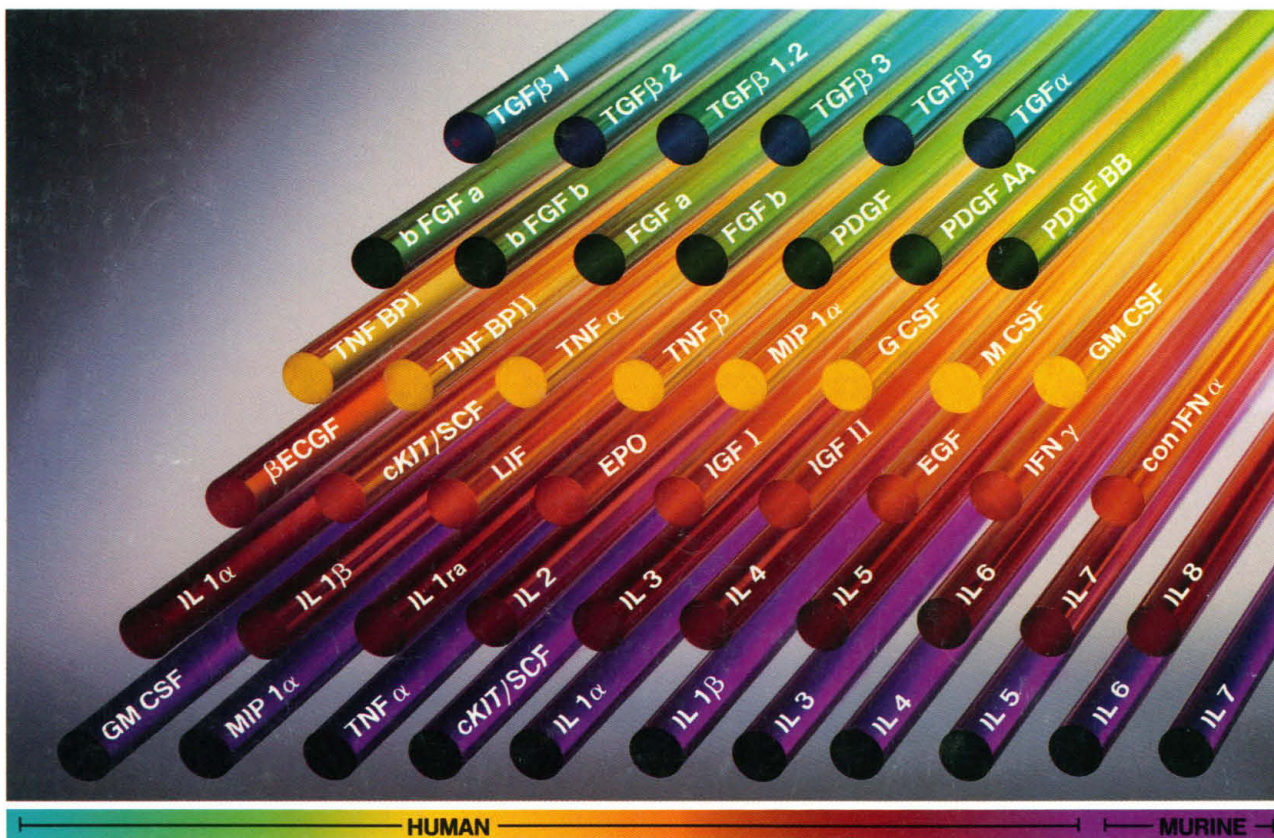
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