

Products & Materials

Clampless Filtration Manifold System

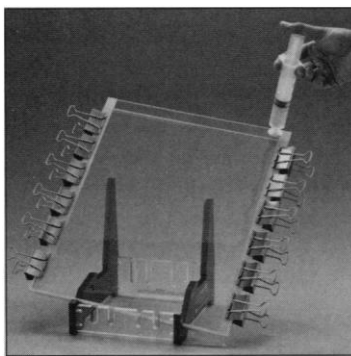
The Convertible Filtration Manifold System offers a unique design in dot and slot blotting for the immobilization of nucleic acid and protein samples onto membranes. A series of interchangeable top plates and gaskets, which are all compatible with a universal base plate, allows the user to choose from five blot formats: two 96-well dot sizes, two 48-well slot sizes, and a 20-well slot size for protein immunoblotting. No screws or clamps are needed for assembly; the seal between the top plate, membrane, gasket, and base plate is made from the same vacuum source that completes filtration. GIBCO BRL. Circle 320.

Automated Capillary Zone Electrophoresis System

The BioFocus 3000 automated capillary zone electrophoresis system is capable of running multiple methods, including capillary zone electrophoresis, isoelectric focusing, nongel sieving, and micellar electrokinetic capillary chromatography. The automated operation and precise temperature control guarantee reproducibility run after run. The system has a fast scanning ultraviolet/visible light detector that can monitor from 1 to 20 wavelengths simultaneously. It can generate three-dimensional plots of absorption spectra versus migration time that allow confirmation of peak purity and aid in peak identification. Temperature controls of the capillary and the autosampler are independent and the autosampler cooling allows overnight running of labile samples. Bio-Rad Laboratories. Circle 321.

DNA Sequencing Gel Accessory

The SE 1776 CastMaster Sequencing Gel Casting Stand overcomes problems associated with pouring sequencing gels. The Cast Master positions large glass plates at the perfect angle for pouring a gel: 45° back and



10° to the right. The polyacrylamide solution travels down one spacer, resulting in a bubble-free gel. The SE 1776 also holds the gel sandwich at a 10° angle during polymerization and safely stores the glass plates when not in use. Hoefer Scientific Instruments. Circle 322.

Three-Dimensional Rendering Software

VOXBLAST is a voxel-based three-dimensional volume-rendering program designed to create three-dimensional opaque or transparent projections and animations from a stack of two-dimensional images. It was created to be used with Micro-Tome, VayTek's digital confocal microscope, but it will render three-dimensional images from data sets from any source. It runs on an IBM AT 386 or 486 with 8 Mb of memory and a Super VGA monitor, or on any Macintosh series II computer with 8 Mb of memory and operating system 6.0.7 or higher. VayTek. Circle 323.

Grant Accounting Software

Tracker 4.0 is an upgrade of a software program for grant expenditure accounting. Many new accounting and report features have been added, along with a new user interface. The program can be applied by a principal investigator whose secretary has no bookkeeping experience or a central administrator who handles grants for many principal investigators. Both Macintosh and IBM-compatible versions are available. KCS Software. Circle 324.

Fast Blot-Developer System

The Fast Blot-Developer System minimizes membrane manipulation and develops dot blots and protein immunoblots in less than 1 hour. The apparatus uses an immunofiltration method that overrides

limiting diffusion, a phenomenon that often is rate-limiting in liquid-solid reactions. This method allows molecules at the reaction site to be constantly replenished by the controlled flow of reagent through the membrane. The system is available in two versions: the "open-top" for development of an entire gel or the "slot-top" that offers two configurations for compatibility with two popular mini-gel electrophoresis systems. Pierce. Circle 325.

Literature

The Standard Advantage is a bimonthly publication that covers changes within the data acquisition and control industry, product application information, and data on IEEE standards. KineticSystems Corp. Circle 326.

HPLC Liquid Chromatography is a 348-page catalog describing products manufactured by Macherey-Nagel. The catalog contains more than 200 pages of applications and more than 500 chromatograms. DyChrom. Circle 327.

Guide to UV/VIS, Fluorescence, and Polarimetry Systems is a 12-page pamphlet designed to familiarize the reader with key features of products in these application areas. Perkin-Elmer. Circle 328.

Nucleic Acids Techniques in Agarose Gels is a technical bulletin containing more than 80 selected references on DNA recovery and techniques performed in the presence of remelted agarose gels. FMC BioProducts. Circle 329.

Microman for Polymerase Chain Reaction is a brochure on positive displacement pipettes for use when risk of aerosol contamination or carryover from nondisposable pipettor components must be absolutely minimized. Gilson Medical Electronics. Circle 330.

Micropreparative Purification and Analysis of DNA is an application note that describes the use of the SMART System, a system for micropurification that isolates biomolecules in nanogram and microgram quantities, and PhastSystem, an automated electrophoresis workstation. Pharmacia LKB Biotechnology. Circle 331.

The Bioprocessing Media, a quarterly newsletter, provides cell culturists information ranging from research to production scale applications. Endotronics. Circle 332.

The Basic Microscope, Use & Care is a step-by-step guide. The 19-min videotape demonstrates every aspect of basic microscopy. Olympus. Circle 333.

Your Edge in Electrophoresis is a catalog featuring a wide selection of products for researchers to make electrophoresis faster and easier. Zoion Research. Circle 334.

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.

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

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

➤ **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Include billing information, and desired publication date.

➤ **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 940
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816

➤ **Rates:** Ads are \$41 per line; \$410 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. If you would like *Science* to give estimated cost, indicate on letter.

➤ **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.

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

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

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/2 page and larger) and all Marketplace listings, contact:

Daniel Moran
Science Classified Advertising
 Telephone: 202-326-6541
 FAX: 202-682-0816

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

POSITIONS OPEN

ASSISTANT PROFESSOR SCHOOL OF MEDICINE DEPARTMENT OF ANATOMY UNIVERSITY OF PENNSYLVANIA

A tenure-track assistant professor position is being offered by the Department of Anatomy of the University of Pennsylvania School of Medicine. With this appointment the department is beginning a recruitment program that will emphasize the molecular analysis of problems in developmental biology. The successful candidate will be expected to establish an extramurally funded research program using a molecular biological approach to developmental biology. The position will also involve the teaching of medical students (e.g., histology and cell biology or embryology) and the participation in the training of graduate students and postdoctoral fellows.

Application deadline is 1 March 1992. Send curriculum vitae and three letters of recommendation to: **Search Committee, c/o Dr. James W. Lash, Department of Anatomy, School of Medicine, University of Pennsylvania, Philadelphia, PA 19104-6058.**

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

ASSISTANT PROFESSOR. The Department of Anatomy at Tulane Medical School is in the latter phases of a multiyear recruitment drive. We have hired three new faculty in the last 3 years. We are seeking applications for an additional position at the assistant professor level. Teaching responsibilities will be in gross anatomy, although candidates with experience in microscopic anatomy and neuroscience will also be considered. The research area is open; however, preference will be given to candidates with a strong research program in neuroscience or in cellular/molecular biology. Ph.D., M.D./Ph.D. or equivalent degrees, at least 2 years of postdoctoral research, and funded or fundable research programs are required. Submit curriculum vitae and arrange for three letters of recommendation to be sent by 15 February 1992 to: **Dr. Joseph T. Weber, Department of Anatomy, Tulane Medical School, 1430 Tulane Avenue, New Orleans, LA 70112.** *Tulane is an Equal Opportunity/Affirmative Action Employer. Applications from qualified women and minorities are encouraged.*

University of California, San Diego, **TENURE-TRACK ASSISTANT PROFESSOR POSITION IN PHYSICAL CHEMISTRY.** The Chemistry Department of the University of California, San Diego is recruiting for a position in the area of experimental physical chemistry. Candidates must have a Ph.D. degree and a demonstrated ability for creative research and for teaching at the undergraduate and graduate levels. Open position subject to availability of funds. All applications received through 15 February 1992 will be given thorough consideration. Salary commensurate with experience and based on the University of California pay scale. Candidates should send curriculum vitae, a list of publications, reprints of up to five representative papers, a summary of research plans, and names and addresses of three references to: **Chair, Physical Chemistry Search Committee, University of California, San Diego, Department of Chemistry-0332, 9500 Gilman Drive, La Jolla, CA 92093-0332.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY. The University of Alaska Fairbanks Department of Chemistry and Institute of Arctic Biology have an opening for a tenure-track position in biochemistry at the **ASSISTANT PROFESSOR** level commencing July or August 1992. Applicants must have an earned Ph.D. in an appropriate discipline; postdoctoral research experience is desirable. The successful candidate is expected to establish a vigorous, independent research program in biochemistry that will attract outside funding. Special consideration will be given to research related to high-latitude environmental phenomena. Teaching responsibilities include two courses per year. Start-up funds are available. Please submit a letter of application including statements of research and teaching interests, relevant reprints, copies of university transcripts, and have three letters of reference sent by 1 February 1992 to: **Biochemistry Search Committee, Dr. John W. Keller, Chair, Department of Chemistry, University of Alaska Fairbanks, Fairbanks, AK 99775-0520.** *Women and minorities are specifically encouraged to apply. The University of Alaska Fairbanks is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR BIOLOGY

Saint Louis University seeks an individual interested in molecular regulation for a tenure-track position in biology. Undergraduate and graduate teaching may include microbiology, molecular biology and molecular genetics. Development of an active research program is expected. A Ph.D. and postdoctoral experience is required. Send letter of application, research/teaching interests, résumé, three reference letters and copies of recent publications to: **Dr. R. I. Bolla, Chair, Department of Biology, Saint Louis University, 3507 Laclede, St. Louis, MO 63103-2010** for review beginning 15 February 1992. *Saint Louis University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women, minorities, handicapped, and veterans.*

BIOLOGY, ASSISTANT PROFESSORS, THREE POSITIONS. Jacksonville State University, located in northeastern Alabama is seeking applications for three 9-month tenure-track positions. (1) **VERTEBRATE ZOOLOGIST**—To teach one or more courses in any field(s) of vertebrate zoology, to share in teaching of ecology; general biology; advising. (2) **VERTEBRATE ZOOLOGIST**—To teach human anatomy and physiology, pathophysiology and courses related to specialty; general biology, advising. (3) **PLANT PHYSIOLOGIST**—To teach course in plant physiology and development; to share in teaching of cell biology; general biology, advising. Participation in undergraduate/graduate research expected. Ph.D. required. Salary: Commensurate with experience. Send letter of application, three letters of reference, curriculum vitae and transcripts to: **Personnel Services, Jacksonville State University, Jacksonville, AL 36265.** Applications will be accepted until position filled; review of applications will begin 20 January 1992. *An Equal Opportunity/Affirmative Action Employer.*

BIOLOGY: Berea College: **ASSISTANT PROFESSOR**, tenure-track beginning fall 1992. Ph.D. (microbiology and genetics), commitment to undergraduate teaching and research required. Teach advanced courses in microbiology, genetics, and cell biology, and other courses for majors and non-majors. In keeping with the college's Christian tradition and its emphasis on the worth and dignity of all persons, *Berea encourages applications from women and members of minority groups.* Submit application letter, curriculum vitae, all transcripts, and three reference letters by 1 February 1992, to: **Dr. Ralph Thompson, Biology Department, Berea College, Berea, KY 40404.**

ASSISTANT PROFESSOR

The Hiram College Biology Department is seeking a 2-year leave replacement at the **VISITING ASSISTANT PROFESSOR** level, preferably beginning in late March 1992 but will accept candidates for September 1992. Duties include teaching introductory zoology, vertebrate zoology, and animal physiology. The successful candidate will have duties at the department's well-developed field station facilities and be expected to conduct research on vertebrates that will involve undergraduates. Send letter of interest and teaching philosophy, curriculum vitae, graduate and undergraduate transcripts, and three letters of recommendation to: **Dr. Martin Huehner, Chairperson, Biology Department, Hiram College, Hiram, OH 44234** by 31 January 1992. *Hiram College is an Equal Opportunity Employer and is committed to diversity among its faculty and students.*

ASSISTANT PROFESSOR (tenure track). Positions in structural biology at the University of Texas (UT) Southwestern Medical Center at Dallas.

Ph.D. or M.D. degree, relevant postdoctoral training, and evidence of a firm commitment to a career in independent research are prerequisites. Applicants who apply experimental or computational techniques to fundamental problems in structural biology and whose research interests complement existing programs at UT Southwestern Medical Center will be preferred. Generous start-up funds and a limited teaching load should suit research-oriented candidates.

Send curriculum vitae and a statement of research interests, and arrange for three letters of reference to: **Professor Johann Deisenhofer, HHMI and Department of Biochemistry, University of Texas Southwestern Medical Center, Dallas, TX 75235-9050.** *The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

Postdoctoral Opportunities.

Excellent opportunities for conducting research are now available with leading scientists at the National Institutes of Health.

Human Gene Therapy **W. French Anderson, MD**

A number of positions are available for candidates who are interested in the following areas: 1) development of an injectable/targetable gene transfer vector; 2) application of homologous recombination to human gene transfer; 3) gene therapy for the treatment of human retroviral diseases, and 4) gene therapy for the treatment of hemophilia. Research will be performed in the Molecular Hematology Branch in collaboration with other groups at NIH and our nearby CRADA company, Genetic Therapy, Inc. Research experience in molecular biology, retrovirology, and/or cell biology preferred. Molecular Hematology Branch (OE4), NHLBI, Building 10, Room 7D-18.

Biochemistry **Gilbert J. Chin, PhD**

Proteins of synaptic vesicles and synaptic plasma membranes are being studied in order to decipher the mechanism of neurotransmitter release. Current efforts are focused on the receptor for the neuropeptide FMRFa and the GTP-binding protein rab3A. Experience in biochemistry and molecular biology is required. Laboratory of Developmental Neurobiology (OE-4), NICHD, Building 36, Room B 316.

Cytokine Biology **Kathryn C. Zoon, PhD**

Investigations are seeking to elucidate the mechanisms involved in the action of lymphokines and interferons on the immune response. Candidate will also be involved in the management of contract-supported activities and will also provide expertise in the review of applications, policy decisions, and proposed regulatory actions. Division of Cytokine Biology (OE-4), CBER/FDA, M049, Building 29, Room 104, 8800 Rockville Pike.

Molecular Genetics of Meiosis **Michael Lichten, PhD**

The molecular mechanisms of meiotic recombination and of chromosome pairing in *Saccharomyces cerevisiae* are being examined using a combination of genetic analysis, physical characterization of recombina-

tion intermediates, and analysis of meiotic chromosome structure. A background in molecular biology, protein biochemistry, or genetics is desirable. Laboratory of Biochemistry (OE-4), NCI, Building 37, Room 4C19.

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

The biological functions of tetrahydrobiopterin are being studied, including its role as the essential coenzyme in the synthesis of monoamine neurotransmitters and other biofactors such as nitric oxide (endothelium-derived relaxing factor). Candidates are being sought who are interested in the following areas:

Cell biologists/biochemists to investigate new roles for tetrahydrobiopterin, such as in cell proliferation, neurotransmitter release, and immune response;

Enzymologists to study the structure, mechanism of action, and regulatory properties of the above enzymes;

Molecular biologists to map the catalytic and regulatory domains of these enzymes, including coenzyme and substrate binding sites, through site-directed mutagenesis. Laboratory of Neurochemistry (OE-4), NIMH, Building 36, Room 3D30.

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). 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. Those interested in receiving a catalog featuring descriptions of NIH research laboratories and other postdoctoral opportunities may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a PhD, MD, or equivalent degree and would like to be considered for one of these positions, please send a cover letter, Curriculum Vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892
Department of Health & Human Services • Public Health Service
Equal Employment Employer

POSITIONS OPEN

AQUATIC BIOLOGIST

The Department of Botany seeks candidates for a tenure-track **ASSISTANT PROFESSOR** in the field of aquatic botany with specialization in ecology or environmental science. Applicants should have postdoctoral experience and demonstrated potential to establish a competitive research program. Teaching responsibilities include both graduate and undergraduate courses. Send curriculum vitae, statement of research goals, and addresses of three references to: **Search Committee, Department of Botany, Oklahoma State University, Stillwater, OK 74078**. Full consideration for applications received by 28 February 1992. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, BIOLOGY. Luther College. Tenure-eligible. Beginning September 1992. Expertise in invertebrate biology (parasitology or entomology considered). Doctorate required. Teach upper-level invertebrate biology and participate in general biology course. Direct undergraduate research in context of liberal arts college. Review of applications begins 15 February 1992. **John Tjostem, Head, Department of Biology, Luther College, Decorah, IA 52101**, telephone: 319-387-1554. FAX: 319-387-1080. *Affirmative Action/Equal Employment Opportunity.*

BOTANIST. Antioch College invites applications for a tenure-track position as **ASSISTANT PROFESSOR** of biology, beginning September 1992. We seek applicants who have a commitment to liberal arts education and can teach a wide range of undergraduate biology and environmental science courses, with focus on plant ecology or plant biogeography, teaching responsibilities will include introductory botany, plant physiology, general biology, and other courses that meet the candidate's and institution's needs. A Ph.D. is required and undergraduate teaching experience preferred. To apply send curriculum vitae and three letters of recommendation to: **R. Eugene Rice, Dean of Faculty, Antioch College, 795 Livermore Street, Yellow Springs, OH 45387**. Review of applications will begin on 30 January 1992. *Affirmative Action/Equal Opportunity Employer.*

CARDIOVASCULAR PHYSIOLOGIST. The Department of Veterinary Physiology and Pharmacology, Texas A&M University, invites applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Qualifications include a Ph.D. and/or D.V.M. or equivalent degrees, postdoctoral training in cardiovascular physiology, and demonstrated ability to conduct research in this field. The position will include graduate and professional instruction, participation in collaborative research programs, and development of independent research. Applicants should submit curriculum vitae and names and addresses of three references to: **Dr. James G. Anderson, Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843-4466**. Applications will be reviewed beginning 1 March 1992. *Texas A&M University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. The University of Medicine and Dentistry of New Jersey (UMDNJ), New Jersey's university of the health sciences, School of Osteopathic Medicine is offering a position at the assistant professor level for an individual with expertise in the area of clinical pathology as well as hands-on experience in the area of molecular biology. The individual will hold a full-time appointment in the Department of Pathology and an adjunct position in the Department of Molecular Biology. Responsibilities for this position include directing a full-service laboratory in pathology, teaching in the medical curriculum and establishing a basic research program in the broad area of oncology. The successful candidate will have a Ph.D. degree or equivalent in molecular biology or biochemistry. Salary commensurate with experience. Excellent start-up and fringe benefits are provided with this position. Interested individuals can send their curriculum vitae and names of three references to: **Robert M. Fogel, D.O., Chairman and Professor, Department of Pathology, UMDNJ—School of Osteopathic Medicine, 301 South Central Plaza, Suite 3800, Stratford, NJ 08084**. The UMDNJ is an Affirmative Action/Equal Opportunity Employer, M/F/H/V and a member of the University Health System of New Jersey.

UMD
New Jersey

POSITIONS OPEN

ASSISTANT PROFESSOR POSITION

The Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine is expanding its research programs in several areas of basic neuroscience associated with psychiatric disease. The department will soon acquire over 12,000 square feet of new wet-laboratory space to house its existing programs in developmental and molecular neurobiology as well as its new programs. We seek a talented neuroscientist with outstanding skills in cellular or molecular neurobiology to develop independent research programs in these areas to enrich and complement the department's existing basic and clinical research activities. This will be a tenure-track position at the assistant professor level. The applicant should hold a Ph.D., M.D., or equivalent degree, and have at least 2 years of formal postdoctoral research experience. We particularly encourage physicians with psychiatric training to apply, provided they have the requisite basic science research training. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Applicants should forward curriculum vitae and the names of three referees to: **Dr. Roland Ciaranello, Chairman of the Search Committee, c/o Department of Psychiatry, Stanford University Medical Center, Stanford, CA 94305-5425**.

UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) SCHOOL OF MEDICINE DEPARTMENT OF SURGERY

The Liver Transplant Program in the Division of General Surgery invites applications for a tenure-track position as an **ASSISTANT PROFESSOR** in the area of molecular biology with special interest in the study of cytokine and cytokine receptors, and extensive experience in gene-transfer technology. Candidates should possess graduate training in molecular biology with an excellent record of accomplishment at the postgraduate level.

Applicants should send curriculum vitae, a minimum of two references and a statement of personal interest to: **Michael J. Zinner, M.D., Professor and Chief, Division of General Surgery, Department of Surgery, UCLA School of Medicine, 10833 Le Conte Avenue, #77-130 CHS, Los Angeles, CA 90024-1749**.

UCLA is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

ASSISTANT PROFESSOR WINTER WHEAT BREEDING/GENETICS PLANT AND SOIL SCIENCE DEPARTMENT MONTANA STATE UNIVERSITY

Tenure-track position available July 1992 to direct winter wheat breeding program and develop innovative wheat genetics research program. Required qualifications: Ph.D. in plant breeding, genetics or related field; plant breeding research experience; record of publication. Application review begins 1 February 1992. Send letter of application, curriculum vitae, reprints, and names, address and telephone numbers of four referees to: **Dr. Tom Blake, Plant and Soil Sciences, Montana State University, Bozeman, MT 59717-0312**. For more information telephone: 406-994-5055, or FAX: 406-994-3933, Bitnet ISSTB@JMTSUN1X1. *Veterans preference, Affirmative Action/Equal Opportunity Employer.*

THE SEATTLE VA MEDICAL CENTER IN ASSOCIATION WITH THE UNIVERSITY OF WASHINGTON DEPARTMENT OF PHARMACOLOGY

seeks applications for a tenure-track position at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The successful applicant will be expected to build an independent research program in some aspect of cellular or molecular neurobiology or endocrinology, preferably having relevance to molecular aspects of aging.

The position is within an established group of neuroscience investigators at the Seattle VA Geriatric Research Education and Clinical Center, with interests in neuropeptide gene expression and the structure and function of CNS serotonin receptors, potassium channels, and androgen receptors, emphasizing their role in aging and disease. Send curriculum vitae, a one-page description of research interests and the addresses and telephone numbers of three references to: **Mark Hamblin, M.D., Ph.D., Chair, Recruitment Committee, GRECC, 182B, Seattle Veterans Affairs Medical Center, 1660 South Columbian Way, Seattle, WA 98108**.

POSITIONS OPEN

The Biology and Microbiology Department at the University of Wisconsin Oshkosh is seeking applicants for an entry level tenure-track **ASSISTANT PROFESSOR** to teach a course in ichthyology and share teaching of introductory biology courses beginning 1 September 1992. Ph.D. in zoology with appropriate specialty required. Postdoctoral and teaching experience desirable. Candidate would have the opportunity to help establish an aquatic biology program, and is expected to develop a research program, supervise master's theses and pursue extramural funding. The university has a unique Faculty Development Program for limited funding of research and to provide matching funds for extramural grants. Screening of applicants begins 20 February 1992 and will continue until the application deadline of 16 March 1992. Send letter of application, résumé, three current letters of recommendation and official transcripts to: **M. A. Rouf, Chairman, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901**. An alphabetical listing of all nominees and applicants, without differentiation, may be released following the closing date. *The University of Wisconsin Oshkosh is an Affirmative Action/Equal Opportunity Employer.*

VERTEBRATE PHYSIOLOGIST. Nine-month, tenure-track position at **ASSISTANT PROFESSOR** rank beginning 18 August 1992. Ph.D. required. Responsibilities include directing master's thesis research and teaching human anatomy and physiology lecture and laboratories plus courses in specialty. Screening will begin 3 February 1992, and continue until the position is filled. A statement of goals for teaching and research, curriculum vitae and names and telephone numbers of three references should be sent to: **Chair, Division of Biological Sciences, Campus Box 50, Emporia State University (ESU), Emporia, KS 66801-5087**. *ESU is an Affirmative Action/Equal Opportunity Employer. We encourage applications from members of protected classes.*

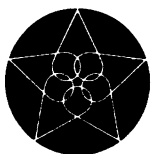
FACULTY POSITIONS IN EXPERIMENTAL PATHOLOGY

The Department of Pathology and Laboratory Medicine at the University of Cincinnati College of Medicine invites applications for several research-track faculty positions as part of a major expansion in our basic research program. Candidates at the **ASSISTANT PROFESSOR** level should have a Ph.D. and/or M.D. degree, significant postdoctoral experience, a strong record of research accomplishment, and potential to develop an independent research program in an academic setting. Senior level candidates should have sustained a track record of research productivity as indicated by continued sources of extramural funding. We are especially interested in recruiting candidates whose research program will utilize cellular and molecular biology techniques to study the pathogenesis of cancer and/or cardiovascular disease.

The department will provide generous start-up funds for these positions. Salary and rank are commensurate with qualifications. These positions are available immediately. Applications will be taken until the positions are filled. Send complete curriculum vitae with names of three references to: **Cecilia M. Fenoglio-Preiser, M.D., Director, Department of Pathology and Laboratory Medicine, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0529**.

FACULTY POSITIONS CELL REGULATION/PHARMACOLOGY THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

The Department of Pharmacology of The University of Texas Southwestern Medical Center seeks applicants for tenure-track positions at the level of **ASSISTANT PROFESSOR**. Applicants must have a relevant Ph.D. or M.D. degree, postdoctoral training, and show evidence of firm commitment to a career in independent research. Departmental faculty apply molecular and cellular techniques to approach problems of fundamental importance to cell regulation. Generous start-up funds and ongoing research support are available to candidates with outstanding potential. Send curriculum vitae, a brief description of proposed research, and up to three reprints to: **Dr. Alfred G. Gilman, c/o Ms. Wendy Deaner, Department of Pharmacology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9041**. *An Equal Opportunity/Affirmative Action Employer.*



Texas Biotechnology Corporation

Located in the heart of the Texas Medical Center, Rice University community, Texas Biotechnology Corporation is a major new company, well funded and staffed with a team of prominent scientists, whose mission is to develop novel biopharmaceutical products for the treatment of cardiovascular disease. The company is seeking qualified science professionals to fill several research and administrative positions.

DIRECTOR OF MEDICINAL CHEMISTRY

The Director of Medicinal Chemistry will be responsible for directing the company's chemical research efforts. A key member of the team, the director's efforts will be geared toward integrating chemical research with other departments to meet the company's goals. The director will be responsible for supervising ten scientists initially.

REQUIREMENTS

A Ph.D. or equivalent and 8-10 years of relevant research experience. A background in industrial medicinal chemistry is desired, but not essential.

MOLECULAR BIOLOGISTS

Molecular biologists are sought to conduct independent research within the department of Molecular Biology and Biochemistry. Efforts will be geared toward vascular mediators, gene therapy as applied to vascular diseases, smooth muscle and endothelial cell growth, restenosis, and atherosclerosis. Individuals will be expected to initiate relevant research within the scope of the company's research objectives.

REQUIREMENTS

A Ph.D. or M.D., at least two years of postdoctoral experience, and experience in cardiovascular molecular biology.

IMMUNOLOGISTS

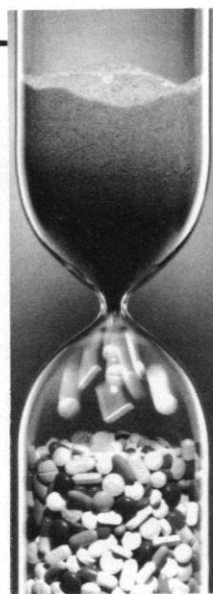
Positions are available for individuals with experience in immunology and inflammatory diseases to conduct independent research within the department of Immunology. Research efforts will focus on vascular mediators, immune damage to vascular tissue, immune cell-endothelial cell interaction, and atherosclerosis. Individuals will be expected to initiate relevant research within the scope of the company's objectives.

REQUIREMENTS

A Ph.D. or M.D., at least two years of postdoctoral experience, and experience in immunology and inflammatory diseases

Please send resume and references to:

Director of Research Personnel
Texas Biotechnology Corporation
7000 Fannin Street, Suite 1920
Houston, TX 77030



Medicinal Chemists

A TIME FOR ACHIEVEMENT

The recent opening of the Glaxo Research Institute (GRI) located in Research Triangle Park, NC, represents our continued commitment to the discovery of drugs for unmet patient needs. Scientists engaged in Glaxo's research and development programs will enjoy the benefits of working in this new premier facility.

As we expand our research interests in the areas of cancer, inflammation and metabolic diseases (diabetes, osteoporosis, obesity), we require additional staff members within our MEDICINAL CHEMISTRY DEPARTMENT. We invite you to join us today in one of these openings:

PhD CHEMISTS

Senior level openings exist for PhD Chemists who possess a strong synthetic organic chemistry background and 2-5 years proven experience in drug discovery within the pharmaceutical industry. Previous experience in peptidomimetics and/or enzyme inhibitor design is strongly desired.

While working on multidisciplinary teams, individuals will combine experimental information and theoretical prediction and expedite progress towards agreed research goals. Your role in experimental design and target selection will be supported by members of our Structural and Biophysical Group and their expertise in crystallography, NMR and molecular modelling. Individuals will be encouraged in original thought, be provided with the resources to turn ideas into action, and be given the freedom to publish basic research results.

Please refer to Job #9140-1-SC on all resumes.

ASSOCIATE SCIENTISTS

A BS or MS in Chemistry is required, along with the ability to conduct multistep synthetic sequences and work constructively in a team-oriented environment. Selected individuals will work closely with a Senior Chemist involved in the design and synthesis of novel compounds of therapeutic interest.

Please refer to Job #9140-2-SC on all resumes.

GRI provides a stimulating environment in which talented individuals can freely express their creativity, benefit from working with multidisciplinary teams towards a common goal and make major contributions to our current projects.

Our North Carolina location (near Raleigh/Durham and Chapel Hill) offers a lot more for people who seek a well-rounded lifestyle. This world famous scientific, industrial, and academic community affords access to respected universities, beautiful residential areas, major retail centers, excellent health care and abundant cultural and recreational facilities. Join Glaxo and enjoy excellent salaries, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction.

Send your resume, INDICATING THE CORRESPONDING JOB # and salary history, to: Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

POSITIONS OPEN

DEPARTMENT OF BOTANY UNIVERSITY OF TORONTO ERINDALE COLLEGE

ASSISTANT PROFESSOR IN BOTANY

Applications are invited for two possible NSERC Women's Faculty Award position in Plant Ecology/Environmental Plant Science. The application of the winning candidate will be submitted to NSERC for approval and funding starting 1 July 1993. Ph.D. is required. The successful applicant will be expected to establish an active research program and to contribute to the teaching at the undergraduate and graduate level. The salary level will be in keeping with NSERC guidelines. The position would be bridged to the tenure-stream. Female applicants with outstanding qualifications are encouraged to send curriculum vitae with an outline of research orientation, and arrange for three letters of recommendation to be forwarded to: **Dr. Josef Svoboda, Associate Chairman of Botany, Erindale College, University of Toronto, Mississauga, Ontario, Canada L5L 1C6. Telephone: 416-828-5368; FAX: 416-828-3792.** Applications should arrive prior to 1 April 1992. *In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents (landed immigrants) of Canada.*

PLANT MOLECULAR BIOLOGY CENTER

PLANT MOLECULAR BIOLOGIST. A tenure-track **ASSISTANT PROFESSOR** position is anticipated for fall 1992 in the Plant Molecular Biology Center with appointment in the Department of Biological Sciences and possibly Chemistry. Candidates must have a demonstrated competence in plant molecular biology. A Ph.D. and postdoctoral experience are required. Research areas of particular interest include, but are not limited to, plant gene regulation, manipulation of gene expression, and molecular biology of cell wall genes. Development and maintenance of a vigorous research program with external funding is expected. Other duties will include the supervision of master/doctoral students and the teaching of introductory courses for majors/nonmajors. This will be alternated with a course in the candidate's area of expertise.

Send curriculum vitae, statement of research goals, representative reprints, and three letters of reference by 31 January 1992 to: **Dr. Marvin Starzyk, Plant Molecular Biology Center, Northern Illinois University, DeKalb, IL 60115. Telephone: 815-753-1753.** *Northern Illinois University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR POSITION NANCY PRITZKER LABORATORY DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES STANFORD UNIVERSITY

The Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine seeks to expand its research, clinical and teaching efforts in the molecular biology of brain development. Toward this end, we have created the Nancy Pritzker Laboratory of Developmental and Molecular Neurobiology. The Nancy Pritzker Laboratory will provide research space for five independent, interactive faculty-led research groups organized around the theme of genetic and molecular control of neuronal development. We currently have an active and established program in molecular neurobiology of CNS receptors and enzymes and a strong collaborative effort in molecular genetics in severe developmental disorders. We seek a cellular or molecular neurobiologist to develop an independent research program in neuronal development that would complement our existing academic programs. This is a tenure-track position at the assistant professor level. Applicants should hold the Ph.D., M.D. or equivalent degree, and have at least 2 years of formal postdoctoral research experience in molecular biology and neurobiology. Physicians with psychiatric or child psychiatric training are invited to apply, provided they have the requisite basic science research training. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Applicants should forward curriculum vitae and the names of three referees to: **Dr. Roland Ciaranello, Chairman of the Search Committee, c/o Department of Psychiatry, Stanford Medical Center, Stanford, CA 94305-5425.**

POSITIONS OPEN

ASSISTANT PROFESSOR—ECOLOGIST. We invite applications for a tenure-track position for fall 1992. Applicants must have a Ph.D. in ecology or a related discipline. Teaching and postdoctoral experience are preferred. Candidates must be able to teach ecology, general biology and an advanced course. A productive research program is expected. Animal ecologists are especially encouraged to apply. Send letter of application indicating teaching and research interests, curriculum vitae, three letters of reference and copies of all college transcripts, postmarked by 21 February 1992, to: **Dr. Winfield Fairchild, Department of Biology, West Chester University, West Chester, PA 19383.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF MEDICINAL CHEMISTRY. Available 1 July 1992. Ph.D. and postdoctoral experience required. Preference to candidates with experience in small molecule-macromolecule interactions, computational chemistry or biological NMR. Development of a strong research program and participation in teaching at both undergraduate and graduate levels expected. Send curriculum vitae and summary of research proposal, and have three letters of recommendation sent to: **Dr. Thomas A. Baillie, Department of Medicinal Chemistry, BG-20, University of Washington, Seattle, WA 98195, by 31 March 1992.** *Affirmative Action/Equal Opportunity Employer.*

MICROBIOLOGIST DEPARTMENT OF BIOLOGICAL SCIENCES UNIVERSITY OF TEXAS AT EL PASO

The Department of Biological Sciences of The University of Texas at El Paso is continuing to increase its research and teaching base in microbiology/molecular biology, and invites applications for a tenure-track position at the rank of **ASSISTANT PROFESSOR.** Productive research and quality teaching in a broad-based undergraduate and graduate program are expected.

Applicants should hold a Ph.D. degree and should have research experience in microbial toxicology, biodegradation, or related fields. Preference will be given to candidates with recombinant DNA expertise, but excellence in other areas of research involving microbiology/molecular biology will be considered. Available September 1992, contingent on funding.

Send curriculum vitae, statement of research interests, and listing of three references (name, address, and telephone numbers) by 1 February 1992 to: **Dr. Larry P. Jones, Department of Biological Sciences, The University of Texas at El Paso, El Paso, TX 79968-0519.** *The University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN MICROBIOLOGY

The Discipline of Microbiology invites applications for a tenure-track position in microbiology at the **ASSISTANT PROFESSOR** level beginning fall 1992. A Ph.D. is required. The candidate is expected to teach medical microbiology to first- and second-year osteopathic medical students. Research is encouraged. Applicants should submit curriculum vitae, transcripts, three letters of recommendation and a statement of teaching philosophy and career objectives to:

**Chairman, Microbiology Search Committee
College of Osteopathic Medicine of the Pacific
College Plaza
Pomona, CA 91766
Closing date: 31 January 1992.**

INVERTEBRATE PHYSIOLOGIST. ASSISTANT PROFESSOR. Tenure track. Ph.D. required. Candidate will be expected to teach general biology. Invertebrate zoology, physiology, direct undergraduate and master's research projects, develop own research program and seek extramural funding. Preference to candidates with teaching experience and whose research area complements existing faculty. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references by 7 February 1992 to:

**Dr. J. A. Butts, Chairperson
Department of Biology
Appalachian State University (ASU)
Boone, NC 28608
Telephone: 704-262-3025**

ASU is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at the University of Massachusetts Medical School has two openings for entry level **ASSISTANT PROFESSORS.** Applicants must have completed the M.D. or Ph.D. degree, at least 2 years of postdoctoral research training, and have a strong background and research interest that focuses on cellular and molecular bases of physiology. Successful applicants will be expected to conduct active independent research programs and participate in teaching medical and graduate students.

Candidates should submit by 31 January 1992 curriculum vitae, a complete list of publications, a brief statement summarizing present and future research interests and objectives, and have three letters of reference sent to:

**H. Maurice Goodman, Ph.D.
Professor and Chairman
Department of Physiology
University of Massachusetts Medical School
55 Lake Avenue North
Worcester, MA 01655**

The University of Massachusetts Medical School is an Affirmative Action/Equal Opportunity Employer. Applications from women, minorities and handicapped persons are especially encouraged.

PLANT SYSTEMATIST. The College of William and Mary invites applicants for a 1-year **VISITING ASSISTANT PROFESSORSHIP** in the Department of Biology that is anticipated to be advertised as a tenure-track position after 1 year. The successful applicant must be committed to excellence in teaching and in research, and must establish a vigorous research program involving undergraduate and master's level graduate students. The research program is expected to employ modern biochemical and molecular approaches to the systematics of vascular plants. Teaching responsibilities will include an undergraduate plant systematics course with a strong field emphasis and an advanced undergraduate or graduate course in systematics, and in future years may include teaching general botany. The College of William and Mary has an enrollment of 5500 undergraduate and 1800 graduate students in the arts and sciences and four other schools. The department has a full-time faculty of 20 members, 200 junior/senior biology majors, and 15 graduate students. Facilities include a large greenhouse, a herbarium of over 55,000 specimens, and a scanning electron microscope. Screening of applications will begin on 20 February 1992, and the search will remain open until the position is filled. Interested applicants should submit curriculum vitae, the names, addresses, and telephone (and FAX) numbers of three references, and one-page statements of teaching and research interests and capabilities to: **Stewart Ware, Department of Biology, College of William and Mary, Williamsburg, VA 23187-8795.** *The College of William and Mary is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly urged to apply.*

FACULTY POSITION IN PHARMACOLOGY ASSISTANT/ASSOCIATE PROFESSOR

The Department of Pharmacology, University of Tennessee College of Medicine, is seeking candidates with research interests in cancer pharmacology/tumor biology for a tenure-track position, available 1 July 1992, to initiate a laboratory program in the area of cellular growth factors and regulators of relevance to problems in current cancer therapy. Experience in the application of modern constructs of biochemistry, molecular biology, and cell biology to the area of research is essential. Candidates should possess the Ph.D. degree in pharmacology, biochemistry, or a related discipline, or the M.D. degree, and should have demonstrated excellence in research and a commitment to teaching. Candidates will be expected to establish an independent research program and participate in teaching of pharmacology to professional and graduate students. *Applications from minority candidates and women are strongly encouraged.* Please submit curriculum vitae, the names of three references, and a brief statement of future research plans to: **Dr. Mervyn Israel, Search Committee Chairman, or Dr. Murray Heimberg, Department Chairman, Department of Pharmacology, University of Tennessee, Memphis, The Health Science Center, Memphis, TN 38163.** Search will continue until the position has been filled. *The University of Tennessee, Memphis is an Equal Employment Opportunity/Title IX/Section 504/Affirmative Action Employer.*

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Join The Excitement Of Drug Discovery Research.

Bring your skills and expertise to The Du Pont Merck Pharmaceutical Company, a joint venture between Du Pont and Merck & Co. We are driven by creative and innovative science to help meet society's healthcare needs through the discovery and development of novel pharmaceuticals.

We currently are seeking scientists to expand our efforts in the area of computer-aided drug design (CADD). You will join a focused effort to use structure- and mechanism-based design to discover novel human therapeutics. The CADD group will collaborate with scientists in X-ray crystallography, high-field NMR, peptide and protein chemistry and biophysics, molecular biology, and enzymology.

A position as head of the group is available for a candidate with at least 5 years' post-PhD experience in structure-based drug design, with at least 2 years' experience leading an academic or industrial modelling group. Several positions are also available for principal investigators (PhD) and Staff Scientists (BS/MS).

Qualified candidates will have demonstrated abilities to work directly with chemists, crystallographers, and NMR spectroscopists in drug design.

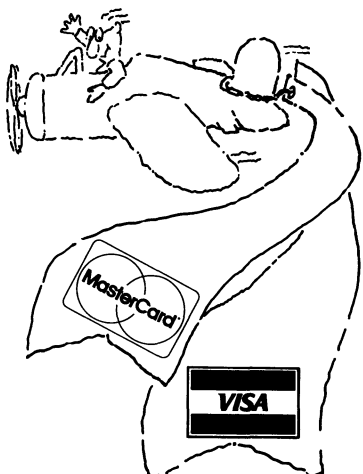
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Merck Pharmaceutical Company, Du Pont
Experimental Station E400/6220,
Wilmington, DE 19880-0400.**

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR, MATERIALS CHEMIST. Tenured or tenure-track position starting August 1992. Interests in design and synthesis of organic materials including polymers. Send credentials and three letters of reference by 3 February 1992 (or until suitable candidate applies thereafter) to: **Professor Craig J. Eckhardt, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE 68588-0304. Telephone: 402-472-2734. Affirmative Action/Equal Opportunity Employer.**

NUTRITIONAL BIOCHEMISTRY/ METABOLIC REGULATION

Applications are invited for two faculty positions in the field of nutritional biochemistry/metabolic regulation. The successful applicants will join a research group in nutritional biochemistry in a suite of newly constructed laboratories and associated animal facilities and will establish independent research programs in the areas of protein, lipid or carbohydrate metabolism. These are tenure-track positions funded by the Medical Research Council of Canada through its Development Grant Program. Successful candidates must qualify for support through this program.

Appointments may be made at either the **ASSISTANT OR ASSOCIATE PROFESSOR** rank.

Memorial University is committed to the principle of Equity in Employment. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

Applications, together with curriculum vitae, names of three referees and three representative publications, should be sent before 1 March 1992, to:

Dr. K. M. W. Keough
Head, Department of Biochemistry
Memorial University of Newfoundland
St. John's, Newfoundland A1B 3X7, Canada

NEPHROLOGY DIVISION FACULTY POSITION

The University of California, Los Angeles (UCLA), Division of Nephrology, Department of Medicine, at the UCLA Center for the Health Sciences in Westwood is recruiting a tenure-track faculty member at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The state-funded (hard money) position includes independent laboratory space and equipment, start-up funds, and protected time for research. The applicant must be Board-certified in internal medicine, Board-certified in nephrology, have at least 3 years of basic research experience and extramural funding. The applicant will establish an independent research program in the Division of Nephrology. An expertise in molecular biology is preferred. Since the UCLA Medical School is located on the general campus, collaborations outside the Medical School can easily be established. *The UCLA School of Medicine is an Equal Opportunity/Affirmative Action Employer.* Interested candidates should send curriculum vitae, copies of papers, manuscripts and a list of three references to:

Ira Kurtz, M.D.
Chief, Division of Nephrology
UCLA School of Medicine
10833 Le Conte Avenue
Los Angeles, CA 90024-1689

FACULTY POSITION IN DEVELOPMENTAL BIOLOGY CHILDREN'S HOSPITAL RESEARCH FOUNDATION CINCINNATI, OHIO

The Basic Sciences Division has an opening for an **ASSISTANT/ASSOCIATE PROFESSOR** (tenure track) in the University of Cincinnati. The position will allow over 90% of time to be spent on research, with the remaining time spent in an active developmental biology graduate program. A new research building has recently been completed. Outstanding candidates with research interests in mammalian developmental genetics, neurobiology, transcription factors or homeobox genes are encouraged to apply.

Please send curriculum vitae, research plans, and the names and addresses of three references to: **Search Committee, Division of Basic Science Research—NRB 2013, Children's Hospital Research Foundation (CHRF), Elland and Bethesda Avenues, Cincinnati, OH 45229-2899.**

CHRF is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF VICTORIA MYCOLOGY

The Department of Biology, University of Victoria, is seeking a person with expertise in mycology for a tenure-track **ASSISTANT PROFESSOR** position. The successful applicant will be expected to teach mycology in our lower-level core botany course and to provide more specialized instruction related to the candidate's area of expertise in our upper-level program. The deadline for applications is 1 March 1992. Applicants must send their curriculum vitae, at least one copy each of two recent publications, a description of research interests, and names of at least three references who can be contacted to:

Dr. Louis A. Hobson, Chair
Department of Biology
University of Victoria
P.O. Box 1700
Victoria, B.C. V8W 2Y2, Canada

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of Victoria is committed to an Employment Equity program. Women are particularly encouraged to apply.

BIOLOGY FACULTY POSITION OPENING FOR FALL 1992

TENURE-TRACK POSITION IN BIOLOGY. The Department of Biology at The College of St. Catherine seeks a broadly trained biologist to fill a tenure-track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR** beginning in the fall of 1992. A Ph.D. is required and postdoctoral experience preferred. The successful candidate will demonstrate excellence in teaching and will be expected to develop a research program in which undergraduates can participate. Courses to be taught include developmental biology, evolutionary biology, introductory biology for majors and non-majors and a course in his or her area of expertise. Send curriculum vitae, transcripts, three letters of recommendation and a statement of teaching and research interests postmarked by 24 January 1992 to: **Dr. Deborah D. Wygal.**

The College of St. Catherine
2004 Randolph Avenue
St. Paul, MN 55105

Equal Employment Opportunity/Affirmative Action.

ASSISTANT OR ASSOCIATE PROFESSOR. The Department of Pathology at the University of Tennessee Medical Center, Memphis, is now recruiting academic pathologists to establish an independent research program in addition to participating in the department's educational and service activities. Preference will be given to those candidates whose research and clinical interests interface well with the ongoing research in the department which include cancer research (proliferation and differentiation control, cancer suppressor genes and extracellular matrix-cell interactions), neuropathology (NGF actions and axonal transport mechanisms) and cytokine research (interferon, receptors, signal transduction and gene expression control). Candidates should have an M.D. or M.D./Ph.D. with a productive publication record and a strong experimental background. Candidates should submit their curriculum vitae and three letters of recommendation for evaluation between 1 March and 31 March 1992 to: **Robert E. Scott, M.D., Chairman and Director, Department of Pathology, University of Tennessee and Baptist Memorial Hospital, 800 Madison Avenue, Memphis, TN 38163. The University of Tennessee, is an Equal Employment Opportunity/Title IX/Section 504/ADA Affirmative Action Employer.**

AGRICULTURAL BIOTECHNOLOGY LABS NATIONAL CHUNG HSING UNIVERSITY TAIWAN

Applications are invited for **ASSOCIATE PROFESSORS** and **POSTDOCTORAL** positions in the field of plant molecular biology, plant biochemistry, or biotechnology. Responsibilities will begin on 1 August 1992. Applicants should send curriculum vitae, statement on research interests, and have three letters of recommendation sent to: **Dr. Yau-Heiu Hsu, Director, Agricultural Biotechnology Laboratories, National Chung Hsing University, Taichung, Taiwan 40227, Republic of China.**

POSITIONS OPEN

MOLECULAR ONCOLOGY FACULTY POSITION

Louisiana State University Medical Center (LSUMC)-Shreveport is proud to announce the opening of the Center of Excellence in Cancer Research. Opportunities are available at the **ASSISTANT/ASSOCIATE PROFESSOR** level for individuals actively pursuing cancer research, especially in the areas of viral oncogenesis, growth factors, oncogenes, and signal transduction. Appointments will be jointly between the center and either the Department of Microbiology/Immunology or Biochemistry/Molecular Biology.

If interested, please send three letters of reference, a copy of your curriculum vitae and a brief description of research interests to:

Jonathan Glass, M.D.

Professor of Medicine

Director, Center for Excellence in Cancer Research

LSU Medical Center-Shreveport

P.O. Box 33932

Shreveport, LA 71130-3932

At the Institute for Genetics, University of Cologne, a position of:

FULL PROFESSOR (C4)

will become vacant as of 1 March 1993 due to the retirement of Walter Vielmetter.

The institute is part of the Faculty of Sciences at the university. Applicants should be prepared to participate in the research-oriented teaching program for students in biology. Applicants should have a strong record and a research program in molecular biology and/or genetics. It is expected that applicants are interested in participating in one of the two Center Grants ("Sonderforschungsbereiche") of the Deutsche Forschungsgemeinschaft in Cologne: SFB 243—Molecular Analysis of the Development of Cellular Systems. SFB 274—The Modular Organization of Genomes.

Please send your application together with curriculum vitae, bibliography and a résumé of your research interests to:

Dekan der math.-nat. Fakultät

der Universität zu Köln

Albertus-Magnus-Platz

D-5000 Köln 41

Federal Republic of Germany

The deadline for applications is 31 January 1992.

The University of Cologne is an Equal Opportunity Employer.

MAMMALIAN DEVELOPMENTAL GENETICIST ASSISTANT, ASSOCIATE OR FULL PROFESSOR

Candidates are being sought with special interest in developing mouse models for human disease through gene transfer, homologous recombination in embryonic stem cells and transgenic animal preparation. The faculty member will be housed in newly remodeled space within Emory's Department of Genetics and Molecular Medicine. He/she will have the opportunity to interact and collaborate with other faculty interested in the molecular basis of development and disease, assist in supervising a shared mouse genetics facility and participate in active graduate and medical student training programs. Emory Medical School and University have made major commitments to building expertise and visibility in mammalian molecular genetics and the molecular basis of disease. This provides exciting opportunities for career development in the setting of Emory's pleasant suburban Atlanta campus.

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

Douglas C. Wallace, Ph.D.

**Robert W. Woodruff Professor of Molecular Genetics
Chairman, Department of Genetics
and Molecular Medicine**

Rollins Research Center, Room 3035

Emory University School of Medicine

Atlanta, GA 30322

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DRUG DISCOVERY OPPORTUNITIES

The Medical Research Division of American Cyanamid is recognized as a leader in the research and development of therapeutic compounds. Our products have been instrumental in the treatment of infectious diseases, cancer, cardiovascular and central nervous system diseases. To build upon our strengths and create an environment that will foster an even stronger and more dynamic R&D organization, we are seeking the following professionals:

Postdoctoral Scientists Oncology and Immunology Research Section

This section is embarking on a new initiative in cancer drug discovery that is based on the exploitation of recent advances in the understanding of drug resistance, signal transduction and cell growth regulation. We are currently focusing on strategies to identify agents with novel mechanisms of action that can be employed in the treatment of highly resistant solid tumors. These studies will include investigations on: the mechanisms of intrinsic drug resistance (e.g., multidrug resistance, topoisomerase) in colon cancer; hormone therapy resistance in breast cancer; the role of glutathione in signal transduction and drug resistance; the mechanism of action of newly isolated natural product antitumor agents; and the use of molecular biological approaches (e.g., DNA transfection, transgenic technology) to develop more relevant models for studying the processes regulating tumor growth.

Three immediate openings are available for highly motivated scientists to join our basic research drug discovery program. Applicants should have a PhD in cell biology, pharmacology, biochemistry or molecular biology with a minimum of 2 years of postdoctoral training. Applicants are expected to conduct high quality work warranting publication in peer-reviewed journals. (Dept. RK1)

Postdoctoral Scientist Anti-Infective Research Section

There is an immediate opening for a highly motivated scientist to study the biology and molecular biology of human cytomegalovirus in an established laboratory. Through the creation of viral recombinant mutants, viral gene function and virus-cell interactions will be studied. Applicants should have a PhD in virology, microbiology, or molecular biology and are expected to conduct high quality work warranting publication in peer-reviewed journals. (Dept. TJ)

Biologist

We also have an immediate opening for a research biologist with a BS or MS in molecular biology or biochemistry and 2-5 years of relevant hands-on experience. The candidate will work with other scientists in a coordinated team effort in cancer drug discovery and will be expected to function with a minimum of supervision. Demonstrated proficiency carrying out state-of-the-art molecular and protein chemistry techniques is essential. (Dept. RK2)

We are located at the Lederle Laboratories campus of American Cyanamid, a 580-acre campus-like setting in Rockland County, only 25 miles north of New York City. The salaries are fully competitive and include comprehensive benefits.

For consideration, send your resume, indicating the Dept. code for the position of your choice, to: Personnel, Lederle Laboratories, 401 N. Middletown Road, Pearl River, NY 10965. An Equal Opportunity

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POSITIONS OPEN

Two full-time faculty research positions available: (1) **ASSOCIATE/FULL PROFESSOR PSYCHIATRIST/NEUROPSYCHOPHARMACOLOGIST** to organize a program of clinical/psychopharm research. Laboratory backup is available. Experience in developing and in carrying out psychopharmacological protocols required. Grant history is desirable. The department has highly successful research endeavors in behavioral medicine, affective and anxiety disorders, behavioral neurobiology and substance abuse. Collaborative skills are highly desirable. Funds for Fellows available. (2) **ASSISTANT PROFESSOR BEHAVIORAL NEUROPHARMACOLOGIST** to conduct independent research using whole animal behavior and to collaborate with neurophysiologists, neuroanatomists, neurochemists, and clinicians. Interests and expertise in attention, stress, drug abuse or depression desirable. Salaries: competitive. Tenure eligibility/tenure available. Contacts: **Neuropsychopharmacologist—A. T. Meyerson, M.D., Chairperson, or Leonard Derogatis, Ph.D., Associate Chair for Research; Behavioral Neuropsychologist—Gary Aston-Jones, Ph.D., Director, Division of Behavioral Neurobiology.** All at Department of Psychiatry and Mental Health Sciences, Hahnemann University, Mail Stop 403, Broad and Vine, Philadelphia, PA 19102.

TRUSTEE PROFESSORSHIP IN MOLECULAR BIOLOGY UNIVERSITY OF PENNSYLVANIA

The University of Pennsylvania School of Veterinary Medicine seeks candidates for a tenured professorship in molecular biology. Candidates should be established investigators with a well-funded, active research program and an outstanding record of scholarly contributions. This recruitment is part of our long-range commitment to expand the molecular biology research efforts in the school. The appointment will be in either the Department of Animal Biology or Pathobiology, depending on the research and teaching interests of the candidate. The position offers extensive opportunity for collaborative research and participation in various graduate and undergraduate programs throughout the university. Applicants should provide curriculum vitae, list of publications, statement of research interests and names and addresses of at least three references to: **Dr. Roselyn J. Eisenberg, Chair, Trustee Professorship Search Committee, Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104-6008; telephone: 215-898-6552; FAX: 215-898-8385.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are strongly encouraged.*

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Place your classified ad in any January 1992 or February 1992 issue of *SCIENCE* and we'll give you double exposure. We'll display the same position announcement at the **Employment Exchange** during the **AAAS Annual Meeting** for only \$40 more. That's less than the cost of one additional line.

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POSITIONS OPEN

OCEAN SCIENCES

ASSOCIATE/FULL PROFESSORS. Several openings in marine biology, marine natural product, biotechnology and fields related to marine resources. Qualifications: Ph.D. and fluent in Mandarin Chinese. Duties: research and teaching. Applicants are invited to send curriculum vitae and list of three referees to: **Dr. W. H. Wang, Institute of Marine Resources, National Sun Yat-sen University, Kaohsiung, Taiwan, Republic of China.**

At the Institute for Genetics, University of Cologne a new position of

FULL PROFESSOR (C4)

is vacant and should be filled as soon as possible.

The Institute is part of the Faculty of Sciences at the university. Applicants should be prepared to participate in the research-oriented teaching program for students in biology. Applicants should have a strong record and a research program in molecular biology and/or genetics. It is expected that applicants are interested in participating in one of the two Center Grants ("Sonderforschungsbereiche") of the Deutsche Forschungsgemeinschaft in Cologne: SFB 243—Molecular Analysis of the Development of Cellular Systems. SFB 274—The Modular Organization of Genomes.

Please send your application together with curriculum vitae, bibliography and a résumé of your research interests to:

**Dekan der math.-nat. Fakultät
der Universität zu Köln
Albertus-Magnus-Platz
D-5000 Köln 41
Federal Republic of Germany**

The deadline for applications is 31 January 1992.
The University of Cologne is an Equal Opportunity Employer.

ASSISTANT MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSISTANT MEMBER.** The successful candidate will have demonstrated outstanding potential for a research career and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and three letters of references. Please send applications, which we would appreciate receiving by 31 March 1992, to:

**Dr. Kenneth J. Marians
Chairman
Program in Molecular Biology
Sloan-Kettering Institute
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021
SKI/MSKCC is an Equal Opportunity Employer.**

PROFESSOR AND CHAIRPERSON DEPARTMENT OF PHARMACOLOGY

The College of Medicine of Howard University invites applications and nominations for the position of Chairperson of the Department of Pharmacology. The candidate should possess a Ph.D. degree in pharmacology or the M.D. degree with research expertise in molecular biology and pharmacology. Applicants should have experience in teaching and administration. The Department of Pharmacology is responsible for educational programs for medical, dental, pharmacy and graduate students. The department has strong research programs in several specialty areas of pharmacology.

Nominations and applications should be received before 30 April 1992. *Women and minorities are encouraged to apply.* Applications consisting of a letter of intent, curriculum vitae and three references should be sent to: **Allen R. Rhoads, Ph.D., Chairman of the Pharmacology Search Committee, Department of Biochemistry and Molecular Biology, College of Medicine, Howard University, 520 W Street, N.W., Washington, DC 20059.** *Howard University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ORNITHOLOGIST/ SYSTEMATIC BIOLOGIST FIELD MUSEUM OF NATURAL HISTORY

The Field Museum of Natural History is seeking an outstanding systematic ornithologist to fill a career-track appointment in the Department of Zoology at the level of **ASSISTANT CURATOR.** The successful candidate must have a Ph.D. prior to joining the staff, and demonstrate an ability to communicate ideas and research results effectively. Responsibilities will include (i) development of an innovative program of specimen-based research and field activities in systematic biology in its broadest sense; (ii) contribution to care and growth of the collections; (iii) occasional participation in museum public programs. Some curatorial experience is desirable. Opportunities exist for teaching and advising of graduate students at several excellent nearby universities. A statement of research objective is requested in which candidates discuss current and future directions of their research addresses broader conceptual issues in biology. Please send curriculum vitae, statement of research objectives, copies of publications, and three or more letters of recommendation by 21 February 1992 to assure full consideration. Respond to: **Search Committee, Department of Zoology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605.** *The Field Museum of Natural History is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

ASSOCIATE CHIEF OF STAFF, RESEARCH, Cleveland, Veterans Administration Medical Center. Responsible for \$5.5 million annual VA research funding among 50 principal investigators in multiple disciplines in general medical research, complemented by significant efforts in rehabilitation research. Current research program encompasses 42,00 square feet. Affiliated with Case Western Reserve University. Candidates need proven ability to obtain research funding, detailed understanding of funding mechanisms on the local/national levels, competence in management of research programs, academic credentials supporting faculty appointment, and Board certification. Inquiries and curriculum vitae to: **George B. Naff, M.D., Chairperson, ACOS/Research Search Committee (111K), VA Medical Center, 10701 East Boulevard, Cleveland, OH 44106.** Telephone: 216-791-3800. *Equal Opportunity Employer.*

ASSOCIATE DIRECTOR MOLECULAR CYTOLOGY CORE FACILITY

The Molecular Biology Program at the University of Missouri-Columbia seeks an individual with experience in some or all of the following areas: confocal microscopy, low-light video microscopy, image processing/analysis, electron microscopy, microtomy, cryosectioning, immunocytochemistry and in situ hybridization. The successful candidate will train users, maintain instruments, and develop protocols for a multiuser facility.

Ph.D. desirable but not required for those with extensive experience. *Applications from women and members of minorities are particularly encouraged.* Send curriculum vitae and three letters of recommendation to: **Thomas E. Phillips, Ph.D., Biological Sciences, 3 Tucker Hall, University of Missouri, Columbia, MO 65211.** Evaluation of applications will begin 31 January 1992 and will continue until the position is filled.

DIRECTOR OF RESEARCH

The Portland Veterans Affairs Medical Center (PVAMC) and the Oregon Health Sciences University (OHSU) seek an accomplished biomedical scientist with M.D. or Ph.D. degree for the position of Associate Chief of Staff for Research at the PVAMC. He/she will be responsible for administering the PVAMC research program, coordinating the relationship between research at the PVAMC and OHSU, and representing the PVAMC's research program to VA central office. This position will have significant program and faculty development responsibilities. The successful candidate will be expected to continue his/her own research program. The individual should have the qualifications for appointment as an associate or full professor in the appropriate department in the School of Medicine. Send curriculum vitae, including bibliography and the names of at least three references, by 30 January 1992, to: **Michael Davey, M.D., Chair, Search Committee, Research Service (151), VA Medical Center, P.O. Box 1034, Portland, OR 97207.** *An Equal Opportunity Employer.*

83rd Annual Meeting of the American Association for Cancer Research

May 20-23, 1992
San Diego, CA

Program Committee Chairperson - WEBSTER K. CAVENEE, San Diego, CA

Topics and Chairpersons of Major Scientific Events

"Chemoprevention of Cancer"

MICHAEL B. SPORN / Bethesda, MD

"Innovative Tumor Immunology"

TAK W. MAK / Toronto, Ontario, Canada

"Molecular Approaches to Diagnosis and Patient Evaluation"

MARK A. ISRAEL / San Francisco, CA

"p53 Tumor Suppressor Gene"

CURTIS C. HARRIS / Bethesda, MD

"Gene Expression and Chromatin Structure"

WILLIAM T. GARRARD / Dallas, TX

"Genomic Instability and Cancer"

THEA D. TLSTY / Chapel Hill, NC

"The Role of Cell Adhesion in Invasion and Metastasis"

ERKKI RUOSLAHTI / La Jolla, CA

"Hereditary Predisposition to Cancer"

FREDERICK P. LI / Boston, MA

"HIV-Associated Malignancies"

FLOSSIE WONG-STAAAL / La Jolla, CA

"Cytokines/Receptors"

JOHN MENDELSON / New York, NY

"Molecular Carcinogenesis"

SARASWATI SUKUMAR / La Jolla, CA

"Drug Design/Discovery"

DANIEL D. VON HOFF / San Antonio, TX

"Cell Cycle Control"

DAVID BEACH / Cold Spring Harbor, NY

"Breast Cancer"

DENNIS J. SLAMON / Los Angeles, CA

"Receptor Signalling/Transduction"

JOSEPH SCHLESSINGER / New York, NY

"Molecular Genetics of Cancer"

ERIC J. STANBRIDGE / Irvine, CA

"Programmed Cell Death (Apoptosis) in the Etiology and Therapy of Cancer"

JOHN T. ISAACS / Baltimore, MD

"Novel Chemotherapy"

JUDAH M. FOLKMAN / Boston, MA

• Special Lectures

Presidential Address: HAROLD L. MOSES, Nashville, TN

Five Additional Award Lectures

• Sessions of Proffered Papers

Minisymposia, poster discussion sessions, and regular poster sessions will be organized from submitted papers in all areas of cancer research.

- Information, Registration Forms, and Membership Application Forms available immediately upon request from



American Association for Cancer Research

Public Ledger Building

620 Chestnut Street, Suite 816

Philadelphia, PA 19106-3483

Telephone: 215-440-9300

FAX: 215-440-9313

- Information also available on AACR Special Conferences in Cancer Research, the Association's series of smaller meetings focused on rapidly developing areas of molecular biology and cancer research.

MOLECULAR BIOLOGY

QIAGEN INC. is a fast growing Los Angeles area company, committed to excellence in the development and marketing of unique and innovative products for molecular biology. We are seeking highly motivated and talented individuals to join our sales & marketing and R&D groups.



Product Manager (Sequencing)

Ph.D./MS degree in molecular biology with 4+ years of molecular biology laboratory experience. Applicants should have good communication skills, proven technical writing skills and the ability to work independently. Responsibilities include marketing strategy and analysis, product introduction, and working with the sales force. Traveling (30%) is expected.

Technical Sales Representatives

Applicants should have a BS/MS degree in molecular biology or related fields and 2+ years of lab experience in molecular biology. Prior sales experience is preferred, but not necessary. Sales territories are available in New York, North Carolina, Ohio and Montreal, Canada.

Technical Support Representatives

Applicants should have a BS/MS degree in molecular biology. Will be responsible for answering technical inquiries related to our product lines.

Director of Development

Excellent opportunity to act as a liaison between the R&D and marketing departments. A Ph.D. degree with 5+ years in molecular biology laboratory and industrial experience is required. The position is based initially at our corporate headquarters in Duesseldorf, Germany, for approximately 3 years.

Project Managers (Sequencing and Protein expression)

There are two project manager positions available involving the development of products for (1) sequencing or (2) protein expression. The successful candidates will interact closely with the R&D and the sales & marketing groups. A Ph.D. degree with extensive sequencing or protein expression experience is required. The positions are based initially at our corporate headquarters in Duesseldorf, Germany, for approximately 2 years.

We offer competitive salaries, benefits including relocation assistance and a challenging, high growth environment. For immediate consideration, please fax a resume, salary history and reference names to:

QIAGEN INC. 9259 Eton Avenue, Chatsworth, CA 91311 • Fax: 818 718-2056, Phone: 800 426-8157

POSITIONS OPEN

ASSOCIATE/FULL MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSOCIATE MEMBER or FULL MEMBER**. The successful candidate will have an outstanding record of research accomplishment and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and the names, addresses, and telephone numbers of at least four references. Please send applications, which we would appreciate receiving by 31 March 1992 to:

Dr. Kenneth J. Marians
Chairman

Program in Molecular Biology
Sloan-Kettering Institute
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021

SKI/MSKCC is an Equal Opportunity Employer.

CANCER CENTER DIRECTOR

Bowman Gray School of Medicine of Wake Forest University seeks a leading physician-scientist to direct its Comprehensive Cancer Center. A strong clinical program with regional research network and basic sciences core laboratories are prominent features. *Minority and women candidates are especially encouraged. Wake Forest is an Affirmative Action/Equal Opportunities Employer.* Reply to: **William R. Hazzard, M.D., Medical Center Boulevard, Winston-Salem, NC 27157-1052.**

NORTHWESTERN UNIVERSITY CHICAGO, ILLINOIS SOLOVY-ARTHRITIS RESEARCH SOCIETY CHAIR

The Division of Arthritis-Connective Tissue Diseases is seeking to fill an endowed position with an accomplished investigator. We are seeking a Ph.D. or M.D. with interests in basic cellular and molecular immunology. The individual should qualify at the rank of a **SENIOR ASSOCIATE or FULL PROFESSOR**. The position offers an opportunity to collaborate with basic and clinical scientists within an exciting environment. If interested, please send curriculum vitae, a statement of research interests and the names of three references to: **Richard M. Pope, M.D., Department of Medicine, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** *Northwestern University is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR DIABETES RESEARCH. We seek a Scientist (Ph.D.) with established record of productivity in diabetes-related research to direct physiologic laboratory research in an expanding Division of Endocrinology. The Endocrine Division has an active clinical program in diabetes including a Diabetes Education Center and inpatient diabetes unit. Applicants should be capable of independent research and also able to collaborate with clinical scientists. Located on Long Island, Winthrop-University Hospital is a 548-bed teaching hospital affiliated with SUNY at Stony Brook School of Medicine. Send curriculum vitae to: **Ph.D. Search Committee, Department of Human Resources, Winthrop-University Hospital, 259 First Street, Mineola, LI, NY 11501.**

DIRECTOR, ECOSYSTEM SCIENCE

Ecotrust, a private nonprofit conservation organization affiliated with Conservation International, seeks a practical, experienced individual to direct its support programs in ecological and socioeconomic research and monitoring in coastal temperate rain forest communities of North America. Not an academic or research position; involves working closely with people and institutions on a collaborative basis to implement field programs.

Ph.D. in ecological science; 5 years of field and/or organizational experience.

Write: **Spencer B. Beebe, President, Ecotrust, 10 S.W. Ash, Portland, OR 97204.**

POSITIONS OPEN

COORDINATOR EVENTS-RELATED POTENTIAL LABORATORY

The University of Texas Health Science Center at San Antonio is seeking a cognitive neuroscientist to establish and manage an Event-Related Potential Laboratory to study human cognition. Position is based in a Research Imaging Center engaged in brain research using positron emission tomography, magnetic resonance spectroscopy, and magnetic resonance imaging (MRI). The candidate must have a Ph.D. in neurophysiology or a related discipline. Experience in the use of imaging modalities (e.g., MRI) to constrain and augment event-related potential studies is preferred. Background in signal processing is preferred. Demonstrated record of research productivity is essential. Salary commensurate with qualifications. Send curriculum vitae and references to: **Dr. Peter Fox, Director, Research Imaging Center, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78248-7801.** *Equal Opportunity Employer. Minorities and women are encouraged to apply.*



MOLECULAR BIOLOGY DNA SEQUENCING

Ambion, Inc., is seeking a director for its Service Group. The ideal candidate should have postdoctoral or equivalent experience, extensive experience with DNA sequencing, and an entrepreneurial spirit. There may also be opportunities for research and development in several areas of molecular biology.

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

DIRECTOR, TECHNICAL SERVICES. Supervise product and process control systems, including our quality control laboratory. Provide technical assistance in developing new and improved methods and systems for processing, production, quality control and packaging. Also supervise contract packaging operations and product recall programs, as well as serve as governmental liaison. Master's in food science and nutrition and 1 year research experience in food processing industry required. Salary: \$31,700 per year, 40 hours per week, 7:00 a.m. to 4:00 p.m. Contact: **Louisiana Office of Employment Security, Job Order 653886, 603 Center Street, New Iberia, LA 70560.**

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES DIRECTOR, CENTER FOR HEREDITARY OCULAR DISEASE

The Washington University School of Medicine is internationally recognized as a center of excellence in biomedical research and is the major clinical referral center serving a five-state region. A new Center for Hereditary Ocular Diseases is being created within the Department of Ophthalmology and Visual Sciences, building upon the abundant clinical resources and excellent tradition of productive interaction among clinician and research scientists in the medical center environment. Nominations and/or applications are sought for Director of the Center, who will be simultaneously appointed as the Bernard Becker Professor of Ophthalmology and Visual Sciences. Candidates must have productive ongoing research activities, a record of accomplishment in the field of human molecular genetics and demonstrated leadership abilities. Candidates should submit their curriculum vitae and letter of intent to: **Dr. J. Mark Petrash, Washington University (Box 8096), 660 South Euclid Avenue, St. Louis, MO 63110, telephone: 314-362-1172.** *An Equal Opportunity/Affirmative Action Employer, M/F/H/V.*

FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need. Write to:
Science New Lab Service Department
1333 H Street, NW
Washington, DC 20005

POSITIONS OPEN

DIRECTOR OF EXTENSION. Rutgers Cooperative Extension, Rutgers—The State University, New Brunswick, New Jersey. Serves as chief administrator of Cooperative Extension in the state. Significant administrative experience, demonstrated excellence in Cooperative Extension, recognized leadership, public relations and interpersonal skills required. Doctorate required. Available 1 July 1992. Interviewing commences 1 March 1992. Send résumé and names, addresses and telephone numbers of three references to: **Anne L. Sheelen, Associate Director of Extension, Rutgers Cooperative Extension, P.O. Box 231, New Brunswick, NJ 08903.**

Rutgers University is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR OF REPRODUCTIVE GENETICS. We seek an ABMG-certified or -eligible reproductive geneticist to lead the Department of Reproductive Genetics of the Magee-Women's Hospital, with a faculty appointment at the appropriate level in the University of Pittsburgh's Department of Human Genetics and membership in the Pittsburgh Genetics Institute. Research potential is important. Send curriculum vitae and letter of interest and research goals to: **John J. Mulvihill, M.D., Department of Human Genetics, University of Pittsburgh, 130 DeSoto Street, Pittsburgh, PA 15261.** *The University of Pittsburgh and Magee-Women's Hospital are Equal Opportunity/Affirmative Action Employers.*

DIRECTOR OF RESEARCH

Applications are invited for the position of director of research in the Department of Obstetrics and Gynecology at the Albert Einstein Medical Center. The successful candidate will develop an independent research program, oversee other research activities within the department, and participate in teaching programs for medical students and resident physicians. Well-equipped laboratories, technician support, and a faculty appointment at Temple University School of Medicine is available. Candidates must have a Ph.D. degree, several years of productive postdoctoral research experience, and interests in molecular or cell biology as related to reproductive function. Applications should include curriculum vitae, statement of research interests, copies of recent publications, and names of three references. Send to: **Dr. Sze-ya Yeh, Chairman, Department of Obstetrics and Gynecology, Klein POB Suite 410, Albert Einstein Medical Center, 5401 Old York Road, Philadelphia, PA 19141.**

UNIVERSITY OF NEBRASKA-LINCOLN (UNL) VICE CHANCELLOR FOR RESEARCH

Seek applicants and nominees for Vice Chancellor for Research. Reporting to the Chancellor, the successful candidate will be expected to provide dynamic leadership in further developing and strengthening research programs. Requires doctorate, a substantial record of scholarly productivity and funded research, and possess several years of proven administrative experience appropriate to providing strong leadership in a comprehensive land-grant setting. Must be qualified for an appointment as a tenured, full professor in an appropriate discipline.

Will be responsible for the facilitation, development, and promotion of UNL's multi-faceted research programs and the administration of its research policies. This includes participation in state and federal funding efforts, developing relationships with industry, supporting research grants and contracts, administering policies on animal care and the use of human subjects in research, and assisting faculty in seeking out funding agencies and in preparing research grant proposals. Will also be responsible for encouraging and facilitating intercollegiate programs and for financial and physical resources pertaining to research.

Reporting units are the Office of Research and Sponsored Programs Services, the University Museum, the University Press, the Faculty Research Council, Institutional Animal Care and Use Committee, and several research centers.

Applicants and nominees should send letter of interest, up-to-date curriculum vitae and the names of five references prior to 1 February 1992 (or until suitable candidate applies thereafter) to:

Chair, Search Advisory Committee
University of Nebraska-Lincoln
Lincoln, NE 68588-0419

Telephone: 402-472-2116; FAX: 402-472-5110
Affirmative Action/Equal Opportunity Employer.

Entry-Level Ph.D. Positions

The Procter & Gamble Company, located in Cincinnati, Ohio, has entry-level opportunities available for the following positions:

TOXICOLOGISTS (Dept. T5)

We have several entry-level staff toxicology openings to be filled before September, 1992 at our Cincinnati, Ohio technical centers. These positions require a Ph.D. degree, preferably in toxicology; however degrees in pharmacology, physiology, nutritional toxicology, or other life sciences are acceptable if the training or experience meets the needs of the openings. These positions are in applied toxicology and involve the design, implementation, and interpretation of a breadth of studies and applying the results to the development of risk assessments for new products, chemicals, and product ingredients. These toxicologists will work with multidisciplinary teams, manage contract studies, and interact with scientists outside the Company and with regulatory agencies at both state and federal levels.

We will be interviewing candidates at the Society of Toxicology meeting in Seattle, Washington, on February 23-27, 1992.

GASTROINTESTINAL DISEASES RESEARCH (Dept. PDM)

We are seeking an entry-level Ph.D. physiologist/pharmacologist to study the pathogenesis of ulcer disease, gastritis, and non-ulcer dyspepsia. The individual will work in a multidisciplinary gastrointestinal research group interested in understanding the mechanisms of pathogenesis and identifying methods of therapeutic intervention. Good oral and written communication skills are required. Postdoctoral experience is desirable but not required.

Procter & Gamble is a world leader in the research, development, and manufacture of a wide variety of consumer products in the health and beauty care, food and beverage, laundry and household cleaning, and paper areas. Sales last year were \$27 billion, and the R&D budget was \$786 million. We offer competitive salaries, a fringe benefits package in the top 5% of U.S. firms, and excellent opportunities for personal and professional growth.

Applicants must be presently authorized to work in the U.S. on a full-time basis. Resumes, with a list of publications, (*please include position and appropriate Dept. code*) should be sent to:

Dr. N.G. Howell

(list position and Dept. code)

The Procter & Gamble Company

P.O. Box 398707

Cincinnati, OH 45236-8707

Allow 6-8 weeks for response. Procter & Gamble is an equal opportunity employer.

TOXICOLOGY

RESEARCH (Dept. HESD)

We have entry-level openings at our Miami Valley Laboratories for a neurotoxicologist and a developmental toxicologist. A Ph.D. or equivalent is required, preferably in toxicology, although training or experience in other life science disciplines is acceptable if it meets the needs of the openings.

NEUROTOXICOLOGIST

This position involves developing a research program to study the effects of chemicals on the nervous system using techniques of electrophysiology or cell biology. A knowledge of neuroanatomy and behavioral testing in animals, particularly rodents, is desirable.

DEVELOPMENTAL TOXICOLOGIST

This position involves equally basic research in developmental toxicology (mechanisms of abnormal development) and managing developmental and reproductive safety issues for pharmaceutical products. Research experience in toxicology, teratology or developmental biology is required; and experience in biochemistry, cell biology, or molecular biology is desirable.

Procter & Gamble

THE

BIOGEN

MISSION

Career Growth

Biogen is a thirteen year old leading biotechnology company engaged principally in developing genetically engineered human-pharmaceuticals. As a result of its early research, Biogen now derives revenues from five products being sold by its licensees or affiliates in various countries. Biogen currently directs its research and development into areas where the company has particular strength - inflammation, cardiovascular disease, AIDS and select cancers.

Protein Sequencing

An exciting career opportunity for a Research Associate/Associate Scientist currently exists within our Analytical Protein Chemistry group. You will be involved in protein sequencing, interpreting and reporting data, designing and developing experimental approaches for sample handling, and optimizing the performance of sequencing instrumentation. A BA or BS in Biology or Chemistry is required. Research experience and familiarity with protein/peptide analysis is preferred.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

For immediate consideration, call Joe Tringali at (617) 252-9802, or mail/fax your resume to his attention at Biogen, Inc., Ref. SMP50103, 14 Cambridge Center, Cambridge, MA 02142. Fax: (617) 252-9617. Biogen is an Equal Opportunity Employer.

BIOGEN

SCIENTISTS

ImmunoGen is a rapidly growing biotechnology company dedicated to the development of immunotoxins and other cancer therapeutics. Three of the company's products are in Phase II or Phase I/II clinical trials. We are seeking talented scientists to join us in exploring new approaches to treating human disease. Research positions are available at the Ph.D. level in our expanding biochemistry and molecular biology programs.

Research Scientist in Molecular Biology

The Department of Molecular Biology is expanding its antibody humanization program and is seeking applicants with experience in eukaryotic expression systems. The successful candidate must have a Ph.D. in molecular biology with a minimum of two years of experience in the design and testing of eukaryotic expression vectors beyond postdoctoral training. Applicants with experience in expression of chimeric or humanized immunoglobulins preferred.

Research Scientist in Biochemistry

The Dept. of Biochemistry seeks individuals with a Ph.D. in biochemistry or related disciplines, and a strong background in biochemistry. Qualified candidates should enjoy the challenge and excitement of developing new areas of research.

ImmunoGen offers an excellent salary and benefits package including 100% paid Health and Dental Insurance and Tuition Assistance. The company is located in new, fully equipped state-of-the-art laboratories in Cambridge.

Please send a detailed resume including three references and a statement describing your scientific interests and career goals. All responses will be acknowledged. Reply to: **Jeanne Horgan, Personnel Department, ImmunoGen, Inc., 148 Sidney Street, Cambridge, MA 02139.** An equal opportunity employer.

IMMUNOGEN, INC.

POSITIONS OPEN

COLAISTE NA HOLLSCOILE CORCAIGH
UNIVERSITY COLLEGE CORK
DEPARTMENT OF ANATOMY

Applications are invited for the post of **COLLEGE LECTURER IN ANATOMY**.

The appointee should be actively involved in structurally oriented research. An interest in neurobiology, immunochemistry or developmental biology would be of some advantage, though not essential. The department is well equipped for electron microscopy, for a variety of light microscopic techniques and for automatic image analysis.

The appointee will be expected to participate in the teaching programme of the department in the Medical Faculty and also to be involved in developing unitized courses in the Science Faculty.

The salary will be at an appropriate point on the College Lecturer scale—IR£14,643 to IR£20,138 Bar IR£21,553 to IR£27,490 per annum with additional remuneration for a medical qualification.

Informal enquiries may be made to: **Professor John Fraher, telephone: +353-21 276871, ext. 2115/2246. FAX: +353-21 273518.**

Closing date for receipt of applications: 7 February 1992.

Application forms and further details may be obtained from: **Mr. M. F. Kelleher, Secretary, University College, Cork, Ireland. Telephone: +353-21 276871, ext. 2364. FAX: +353-21 276995.**

University College Cork is an Equal Opportunity Employer.

**FACULTY POSITIONS
CANCER BIOLOGY PROGRAM
PUBLIC HEALTH SCIENCES DIVISION
FRED HUTCHINSON
CANCER RESEARCH CENTER**

Laboratory-based independent scientists ready to apply skills in molecular biology, biochemistry or genetics to research in public health science are invited to apply. A major area of interest is molecular epidemiology. Appointment can be at junior or senior member level.

Letters of application together with curriculum vitae, a summary of research objectives and the names and addresses of three referees should be sent by 28 February 1992 to: **Dr. James K. McDougall, Chairman, Search Committee, Cancer Biology Program, Public Health Sciences Division, MP-665, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, WA 98104.** *Smoke-free environment. An Equal Opportunity Employer.*

**UNIVERSITY OF VIRGINIA
DEPARTMENT OF PHYSICS**

The Department of Physics of the University of Virginia invites applications for a tenured or tenure-track faculty position in the area of experimental condensed matter physics. Exceptional candidates in other fields will also be considered. The position may be available in September 1992. Applicants should be demonstrably able to carry out an independent research program and be committed to excellence in undergraduate and graduate education. Apply to: **Daniel Larson, Chairman, Physics Department, University of Virginia, McCormick Road, Charlottesville, VA 22901.** *The University of Virginia is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority candidates.*

DEVELOPMENTAL BIOLOGY

The Biology Department of Bowdoin College seeks a 1-year replacement position, starting September 1992, to teach a course in developmental biology and an additional course (such as cell physiology, plant physiology), as well as participate in a team-taught introductory biology course. Bowdoin College is dedicated to excellent undergraduate education. The successful candidate will have a demonstrated potential for outstanding teaching and research. By 30 January 1992 send curriculum vitae, statement of research activity and three letters of recommendation to:

**Thomas Settlemyre
Department of Biology
Bowdoin College
Brunswick, ME 04011**

Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and minority candidates are especially encouraged to apply.

POSITIONS OPEN

POLYMER SCIENCE AND ENGINEERING UNIVERSITY OF MASSACHUSETTS AT AMHERST

The Department of Polymer Science and Engineering is seeking to make a **FACULTY APPOINTMENT** in the area of structure/morphology. The appointment will most likely be at the assistant professor level but exceptionally promising candidates at more senior levels will also be considered. Qualifications for a senior appointment include an international reputation in the morphology/structure of polymers field. Qualifications for appointment at a junior level include exceptional evidence of promise for establishing an internationally recognized research program and appropriate level of postdoctoral, industrial, or previous academic experience. Salary commensurate with qualifications and experience. It is desired to fill the position by the beginning of the fall semester 1992 or as soon thereafter as possible. Applications are requested by 1 March 1992, but the search will remain open until the position is filled. Send résumés, and the names of at least three references to: William J. MacKnight, Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003. *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

NEUROSCIENCE AND CELL BIOLOGY. Robert Wood Johnson Medical School. New tenure-track positions at junior and senior ranks are available in neuroscience and cell biology at the University of Medicine and Dentistry of New Jersey (UMDNJ)—Robert Wood Johnson Medical School. Scientists will be located in the new Center for Advanced Biotechnology and Medicine, a joint venture with Robert Wood Johnson Medical School and Rutgers University, on the scientific Busch Campus in the New Brunswick/Piscataway area. Investigators with interests in molecular neurobiology, cellular neurobiology and the relationship of biology to behavior and mentation are encouraged to apply. Positions will be available from the summer of 1992. Please submit curriculum vitae, summary of scientific interests and goals, and three letters of reference to: Dr. Ira B. Black, Chairman, Department of Neuroscience and Cell Biology (SCI), UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. *The UMDNJ 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.*

The Department of Biology at Laval University invites applications for a **TENURE-TRACK FACULTY POSITION** for a specialist in the molecular biology of higher or lower plants. Qualifications: Ph.D. or D.Sc., preferably with postdoctoral experience; working knowledge of French, or ability to acquire it within a year of appointment. Rank and salary according to collective agreement (minimum \$42,000). Send applications (with curriculum vitae and names and addresses of three referees) to: Directeur, Département de biologie, Université Laval, Québec, Canada, G1K 7P4. Deadline: 29 February 1992 or until a suitable candidate is found.

Laval University applies an Equal Opportunities Program in which one half of the vacant positions are to be filled by women.

UNIVERSITY OF CAMBRIDGE DEPARTMENT OF PATHOLOGY

UNIVERSITY LECTURER IN MOLECULAR PARASITOLOGY to take up appointment on 1 March 1992 or as soon as possible thereafter. The successful candidate will join the Division of Microbiology and Parasitology and will be expected to play a leading role in the establishment of host parasite genome analysis, in association with Professor Jenefer Blackwell, Glaxo Professor of Molecular Parasitology, and to contribute to the departmental teaching. Previous experience in parasite-related research is not required but experience in "big DNA" technology (YAC, P1 or cosmid cloning) and a thorough commitment to genome research is essential.

Stipend: £16,216 to £25,010.

Further information and application form from: The Secretary, Appointments Committee, 19 Trumpington Street, Cambridge CB2 1QA, telephone: 0223 334999; FAX: 0223 332355. Closing date: 31 January 1992. *The university follows an Equal Opportunity Policy.*

MOLECULAR BIOLOGISTS & CHEMISTS *Oligonucleotide Therapeutics*

PharmaGenics, Inc., a research and development stage company, investigates oligonucleotides as therapeutic agents for cancer and viral diseases. Due to our continued growth, we are seeking highly motivated professionals to conduct research in our Molecular & Cell Biology and Chemistry Departments.

MOLECULAR & CELL BIOLOGY - Senior Scientists

A PhD degree in molecular bioscience is required. Post-doctoral research experience in one or more of the following areas is preferred: protein-nucleic acid interactions, antisense/antigenic oligonucleotides, viral gene expression, receptor-ligand interactions and oncogene/tumor suppressor gene function.

Associate Investigators

A BS or MS in biochemistry, cellular biology or molecular biology is required, preferably with research experience using PCR, nucleic acid hybridization, DNA sequencing and in vitro transcription or translation.

CHEMISTRY - Senior Scientists

A PhD in synthetic organic chemistry is required, together with a broad knowledge of techniques for the isolation and identification of new compounds. Strong synthetic skills are essential and post-doctoral research experience in the synthesis of nucleosides, nucleotides and oligonucleotides, or computer-aided drug design, would be highly desirable. Supervisory experience and good communication skills would be an asset.

Associate Investigators

A BS or MS degree in chemistry is required, preferably with bench experience in synthetic organic chemistry and familiarity with a wide range of standard laboratory techniques.

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FACULTY POSITION IN DEPARTMENTS OF OBSTETRICS AND GYNECOLOGY AND PHYSIOLOGY AND PHARMACOLOGY

Applications are invited for a joint appointment in the Departments of Obstetrics and Gynecology and Physiology and Pharmacology for an individual with expertise in molecular or cellular biology. We seek candidates with a strong research interest in developmental endocrinology preferably in one of the following areas: mechanism of hormone action, mechanisms controlling gene expression, post-translational processing of neuroendocrine peptides or intracellular signaling. Applicants must have the M.D. or Ph.D. degree and postdoctoral research training.

Applicants should submit curriculum vitae, list of publications, brief statements of research interests and objectives, and a list of names and addresses of three references to:

James C. Rose, Ph.D.
Departments of Physiology and Pharmacology
and Obstetrics and Gynecology
Bowman Gray School of Medicine
Winston-Salem, NC 27157

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RESEARCH FACULTY/NEUROSURGERY UNIVERSITY OF KENTUCKY

A faculty position is available for an experienced basic scientist with expertise in the pathophysiology of the brain's response to ischemia and injury. Candidates must have a Ph.D. with postdoctoral experience and be capable of supervising existing laboratories. The present laboratories emphasize the biochemical (arachidonic acid, polyamines, cytokines) and physiologic responses of the brain to ischemia and injury. The candidates will also be expected to develop a research program in their area of expertise and to successfully compete for external funding. More experienced candidates with established research programs are preferred. *Women and minorities are encouraged to apply.* Send curriculum vitae and references to: **Dr. Robert Dempsey, MS 105A, UKMC, 800 Rose Street, Lexington, KY 40536.** *The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Available winter or spring 1992 for the study of the radiobiology of radioimmunotherapy, growth factors and the molecular biology of radioresistance and other related topics. Experience in tissue culture, immunology, molecular biology and small animal handling desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Susan J. Knox, M.D., Ph.D., Department of Radiation Oncology, Stanford University Medical Center, Stanford, CA 94305.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

NATIONAL TAIWAN UNIVERSITY FACULTY MEMBER

Applications are invited for a tenure faculty position in the Institute of Biochemical Sciences, College of Science. Applicants should have a Ph.D. in molecular biology with more than 4 years of research in the field of cellular biology. Applicants should be able to teach in mandarin. Send applications including curriculum vitae, three most important reprints and the name and address of two referees to:

Dr. C. S. Liu
Institute of Biochemical Sciences
National Taiwan University
P.O. Box 23-106
Taipei, Taiwan, R.O.C.

MATHEMATICAL BIOLOGY UNIVERSITY OF UTAH

The Departments of Biology and Mathematics at the University of Utah invite applications for a new interdisciplinary tenure-track position in mathematical biology. We seek a person who combines excellence in research with a genuine commitment to teaching at the undergraduate and graduate levels. The initial teaching responsibility will be to work with members of the Mathematics and Biology Departments to develop an innovative core course in mathematical biology for lower-division undergraduates in the life sciences. The person who fills this position will be expected to maintain an active research program that adds to the university's existing strength in mathematical biology.

Applicants should submit curriculum vitae, a statement of research and teaching interests, and four letters of recommendation to: **R. H. Ward, Department of Biology, University of Utah, Salt Lake City, UT 84112.** Telephone: 801-581-4466 for additional information. Review of applications will begin on 22 January 1992 and will continue until the position is filled. *Applications from minority candidates and women are strongly encouraged. The University of Utah is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS

Postdoctoral positions for an NCI training program in molecular and cellular mechanisms of carcinogenesis are available at The University of Texas (UT) M. D. Anderson Cancer Center-Science Park. Research programs focus on the following areas: DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, normal and tumor cell differentiation, retrovirology, chemoprevention and nutrition in cancer. *Applicants must be U.S. citizens or permanent residents and must have a Ph.D., M.D., or D.V.M. degree.* For application forms, contact: **Dr. Thomas Slaga, Director, U.T. Science Park—Research Division, P.O. Box 389, Smithville, TX 78957;** telephone: 512-237-2403. *We are an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION IMMUNOLOGY

A fellowship is available in the Laboratory of Immunochimistry to study the basic mechanism of retinoid action in immune cells (see *Science*, 15 December 1991 issue). Candidates with training in molecular biology, retinoid chemistry or cellular immunology, and with interests in molecular aspects of transcription regulation by retinoids in the context of lymphocyte activation are invited to apply to: **Dr. U. Hammerling, Memorial Sloan-Kettering Cancer Center (MSKCC), 1275 York Avenue, New York, NY 10021.** *Candidates must be U.S. citizens or permanent residents. MSKCC is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE

A position is available to study gene expression in early mouse embryos. The goal of this work is to understand how the expression of certain genes is regulated in embryos and how their expression is related to the determination and differentiation of particular embryonic structures. Please forward curriculum vitae and names, addresses and telephone numbers of at least three references to: **Dr. William R. Crain, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.** *An Affirmative Action/Equal Opportunity Employer, M/F/H.*

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE

A postdoctoral position is available to study gene expression during early *Xenopus* development. In particular, we are interested in cloning factors that regulate cytoplasmic polyadenylation and consequent translation. In addition, we wish to clone specific transcription factors that are regulated during development. Experience in molecular biology and/or protein biochemistry is desirable. Please send résumé including names, addresses, and telephone numbers of three references to: **Dr. Joel D. Richter, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.** *An Affirmative Action/Equal Opportunity Employer, M/F/H.*

POSTDOCTORAL POSITIONS available immediately to study the nitrogen-fixation (position #1) or the solvent-production (position #2) genes of the clostridia. The research is focused on selected genes and their mRNA and protein products. Ph.D. in molecular biology or experience in a related discipline required. Submit curriculum vitae and names of three references to: **Dr. J. L. Johnson (for position #1) or Dr. J.-S. Chen (for position #2), Department of Anaerobic Microbiology, Virginia Tech, Blacksburg, VA 24061.** Please indicate if applying for both positions. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS AVAILABLE

Postdoctoral positions are available 1 January 1992 and 2 May 1992 for an NIH Cancer and Biology training grant in the basic sciences. The areas of research are in biochemistry, immunology, pharmacology, tumor cell biology and virology and molecular biology. *Only U.S. citizens and permanent residents can apply.* Send curriculum vitae and brief description of research interest and experience to: **Dr. Marvin Fishman, Department of Immunology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, TN 38101.**

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POSTDOCTORAL POSITIONS MAMMARY PROTO-ONCOGENES

Available to study: (1) function of the *Wnt* proto-oncogene family of secreted factors in tumorigenesis and development or (2) cloning and characterization of novel proto-oncogenes by mouse mammary tumor virus insertion mutagenesis. A Ph.D. and experience in molecular biology or protein biochemistry is desired. Laboratory located in a new research tower. Send curriculum vitae and names of three references to: **Gregory Shackleford, Ph.D., University of Southern California School of Medicine, Division Hematology-Oncology, Children's Hospital Los Angeles, Los Angeles, CA 90027.** Telephone: 213-669-5661; FAX: 213-664-9455.

POSTDOCTORAL POSITION. Yale University School of Medicine. Available immediately to study the molecular genetics of the response of human cells to ionizing radiation. Projects include (1) the identification and analysis of radiation-induced genes and proteins along with the investigation of signal transduction pathways in the cell and (2) the analysis of radiation-induced mutations in vivo in transgenic mice. Candidates should have experience in molecular biology. Reply with curriculum vitae and three references to: **Dr. Peter Glazer, Department of Therapeutic Radiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.** *An Equal Opportunity/Affirmative Action Employer.* Telephone: 203-785-2957; FAX: 203-737-2602.

The University of Alabama at Birmingham invites applications for a **POSTDOCTORAL POSITION** to begin working immediately on project investigating the pathogenesis of pulmonary murine blastomycosis. Current studies are focused upon macrophage-conidia attachment mechanisms and cytokine responses of murine alveolar macrophages. Applicants should be highly motivated, have a strong foundation in basic microbiological, molecular and biochemical techniques. Send current curriculum vitae and names of three references to: **Stephen A. Moser, Ph.D., Department of Pathology, The University of Alabama at Birmingham, Room 565 Lyons Harrison Research Building, University Station, Birmingham, AL 35294-0007.** *The University of Alabama at Birmingham is an Affirmative Action/Equal Employment Opportunity Employer and especially invites applications from women and minorities.*

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Ph.D. in Biochemistry, Chemistry or related field, preferably with at least 2 years' experience, or MS plus 5 years' experience, but all strong candidates will be considered. Familiarity with most standard carbohydrate analysis methods is highly desirable. Protein purification experience, including FPLC, a strong plus.

Specific responsibilities will include development and optimization of methods and reagents for the release, purification, derivatization and analysis of oligosaccharides, especially those from glycoproteins and other glycoconjugates. (Ref. #0932)

DNA Sequencing Biochemist

We are seeking a Biochemist to develop new rapid DNA sequencing protocols and commercialize sequencer biochemical kits. The ideal candidate will possess a Ph.D. in Biochemistry with 3 years' experience in DNA sequencing, PCR or related enzyme biochemistry. Background in multicomponent kit development, automated sequencing instrumentation, fluorescently labelled nucleic acid oligomers and electrophoresis separations preferred. (Ref. #1053)

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We can offer you an excellent salary and benefits program, commensurate with experience and education. If you have the credentials and are interested in developing a research program in one of the above areas, we invite you to forward a *curriculum vitae*, including publications, a brief statement of current and future research interests, and the names of at least three references to: **Anthony Cerami, Ph.D., President, Department-MS, The Picower Institute, 350 Community Drive, Manhasset, New York 11030.** We are an equal opportunity/affirmative action employer.

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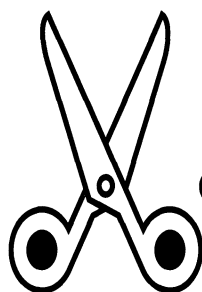
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Enquiries, nominations and applications should be directed to:

Dr. C. R. James
Vice President (Research)
University of Alberta
3-12C University Hall
Edmonton, Alberta T6H 2J9

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The selected candidate will have a B.S. degree in the Biological or Biophysical Sciences or equivalent experience; 2 years of experience with flow cytometry or imaging systems; and a strong knowledge of computers. In addition, tissue culture experience is desirable.

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Pre and Postdoctoral positions are available on an NIH training grant in Developmental Biology at the University of Virginia. The program is broadly based and involves faculty from departments in both the College of Arts and Sciences and the Medical School. Positions are available for research with:

Paul N. Adler	Drosophila developmental genetics
Gary Balian	Extracellular matrix and bone development
Ann L. Beyer	RNA processing, splicing; hnRNP proteins
Robert Bloodgood	Cell surface dynamics
Claire Cronmiller	Sex determination in Drosophila
Douglas DeSimone	Xenopus development
Marilyn Fisher	Vertebrate brain development
Robert Grainger	Inductive tissue interactions
John C. Herr	Sperm differentiation
Jay Hirsh	Drosophila neuronal development
Charles Little	Cell adhesion and vertebrate morphogenesis
Oscar Miller	Electron microscopy of gene expression
Lionel Rebhun	Mitosis and microtubule function
Oswald Steward	"Synapse regeneration"
Jeremy Tuttle	Neurons and their synaptic partners
Michael Wormington	Translational control
Robert Umek	Transcription factors and differentiation

Interested candidates should send a curriculum vitae, a brief description of research interests, and three letters of recommendation either to the faculty member of interest, or to Dr. Paul Adler, Biology Department, University of Virginia, Charlottesville, VA 22901. Candidates for the traineeships must be US citizens or permanent residents. The University of Virginia is an Equal Opportunity/ Affirmative Action Employer; women and minorities are encouraged to apply.

POSITIONS OPEN

DIVISION OF CLINICAL PHARMACOLOGY, DEPARTMENT OF PHARMACOLOGY, Vanderbilt University. We are seeking a **POSTDOCTORAL POSITION** (2 years) focusing on the molecular biology of eicosanoids. Current state-of-the-art recombinant DNA techniques are being used. Both Ph.D.'s and M.D.'s with some molecular biology experience will be considered. Individuals with at least 2 years of training beyond the M.D. degree are eligible to participate in the clinical pharmacology training program. Send applications with current curriculum vitae and names of three references to the attention of: **Colin D. Funk, Ph.D., Department of Pharmacology, Division of Clinical Pharmacology, Vanderbilt University School of Medicine, Nashville, TN 37232. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to study the regulation of colony-stimulating factor-1 gene expression in mature and developing tissue. Molecular biology experience preferred. Send curriculum vitae and names of three references to: **Dr. Maureen A. Harrington, Walther Oncology Center, Indiana University School of Medicine, Room 501—975 West Walnut Street, Indianapolis, IN 46202-5121. Walther Oncology Center is an Equal Opportunity Employer.**

POSTDOCTORAL PHYSICAL OCEANOGRAPHY at the University of Washington. A postdoctoral position is open for a physical oceanographer interested in research on shear, turbulence, and mixed layer dynamics near the equator. The candidate should be experienced in collecting data at sea and in analyzing oceanographic data. The person filling the position will work under the direction of Dr. Michael Gregg and will participate in the Coupled Ocean-Atmosphere Response Experiment (COARE). COARE is an international TOGA program of oceanic and atmospheric observations in the Western Tropical Pacific. The position requires participation in two research cruises scheduled for late 1992 and early 1993. Subsequently, the person will be primarily responsible for analysis and interpretation of data collected with the Advanced Microstructure Profiler (AMP) and the shipboard Doppler acoustic profiler. The initial appointment can begin in the summer of 1992 and will extend for 2 years with a third year available. Recent Ph.D.'s with interest and experience in the above research are requested to submit a résumé and the names of three references to: **Linda Marsh, Applied Physics Laboratory, University of Washington, 1013 N.E. 40th Street, Seattle, WA 98105.**

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POSTDOCTORAL POSITION IN PLACENTAL AIDS TRANSMISSION

A postdoctoral position is available immediately on a newly funded R01 to study simian immunodeficiency virus infection and expression in monkey placental trophoblasts. Ph.D. in cellular or molecular biology or virology/immunology, experience in cell culture and molecular biology required. Submit letter of application, curriculum vitae, and names, addresses and telephone numbers of three references by 31 January 1992 for full consideration to: **Dr. Thaddeus G. Golos, Ph.D., Wisconsin Regional Primate Research Center, University of Wisconsin, 1223 Capitol Court, Madison, WI 53715-1299, telephone: 608-263-3567.**

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POSTDOCTORAL POSITION

Research will involve the analysis and isolation of genes that affect functioning of the dioxin (Ah) receptor, which mediates susceptibility to chemical carcinogens. [See *Science* 252, 954 (1991).] Experiments will employ recombinant DNA (e.g., in vitro mutagenesis, gel retardation, DNA transfection, cDNA library construction) and protein biochemistry (e.g., antibody characterization, Western blot) procedures. Experience in recombinant DNA techniques is essential. Experience in protein biochemistry and tissue culture procedures is preferred. Please send curriculum vitae and names and telephone numbers of three references to: **Dr. Oliver Hankinson, UCLA/Laboratory of Biomedical and Environmental Sciences, 900 Veterans Avenue, Los Angeles, CA 90024. UCLA is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Biochemistry of a novel anticancer nucleoside that is in clinical trial, with emphasis on mechanisms of selective toxicity, interaction with other anticancer drugs, and development of resistance. Ph.D. in biochemistry, cell biology or closely related discipline required, and experience with cell culture techniques an advantage. Send curriculum vitae with names of three references to: **Raymond L. Blakley, Ph.D., D.Sc., Department of Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. Affirmative Action/Equal Opportunity Employer.**



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POSTDOCTORAL POSITION SENSORY NEUROSCIENCE—HEARING

A postdoctoral position is open at the Vision, Touch and Hearing Research Centre, University of Queensland (a Commonwealth Special Research Centre, Director: Professor J. D. Pettigrew FRS) to work with Dr. James O. Pickles on mechanotransduction, development and repair in auditory hair cells. Techniques used include scanning and transmission electron microscopy, immunocytochemistry, and cell culture, and experience in one or more of these areas is required. The appointment is until December 1993, with renewal for a further 3 years dependent on Commonwealth funding. Appointment on ARC research associate or ARC senior research associate scale (\$34,953 to \$37,618 or \$39,463 to \$47,150). Return fare to take up appointment, plus travel allowance for yearly attendance at international meetings are provided. Send curriculum vitae and names and addresses of three referees to: **Dr. James O. Pickles at the Vision, Touch and Hearing Research Centre, Department of Physiology and Pharmacology, The University of Queensland, Qld 4072, Australia, by 1 March 1992, quoting reference no. 52191.**

POSTDOCTORAL POSITION. Available immediately to study mechanisms of cell death by ionizing radiation. This work will involve determining the molecular damage responsible. A knowledge of free radicals involved in damage production would be useful. Send curriculum vitae and addresses of three references to: **Dr. John F. Ward, University of California, San Diego (UCSD), Department of Radiology, Radiation Biology Division, 0610, La Jolla, CA 92093. UCSD is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to use modern techniques in molecular and cellular biology to study the role of cytokines in regulating functions of epithelial cells from the urinary bladder. Salary negotiable, commensurate with experience. Send letter of application, curriculum vitae and two references to: **Dr. Ada Elgavish, Department of Comparative Medicine, University of Alabama at Birmingham School of Medicine, Birmingham, AL 35294. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL ASSOCIATE BASCOM PALMER EYE INSTITUTE UNIVERSITY OF MIAMI

To study Epstein-Barr Virus Infection of Ocular Mucosal-Associated Lymphoid Tissue. Position requires a Ph.D. or equivalent experience in microbiology/immunology biology. Send curriculum vitae, three names, addresses of references to: **Dr. Stephen Pflugfelder, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, P.O. Box 016880, Miami, FL 33101; FAX: 305-326-6337. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS. To investigate the molecular basis of fungal infection of immunocompromised patients using enzymological and recombinant DNA approaches on animal models. Send curriculum vitae and at least three references to: **P. E. Kolattukudy, Director, Ohio State Biotechnology Center, The Ohio State University, 1060 Carmack Road, Columbus, OH 43210. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS (two) in research involving investigations of: (1) neuronal and glial plasticity in adult mammalian CNS, using immunocytochemical ultrastructural and light microscopic approaches; (2) synaptic and nonsynaptic mechanisms involved in control of peptidergic neurons, using conventional intracellular and whole cell recording methods; (3) the roles of intracellular changes and intercellular junctions in the control of peptide neurosecretion, using tissue culture and molecular biological techniques. Salary commensurate with qualifications and experience. Send curriculum vitae, statement of research interests and names and addresses of three references to: **G. I. Hattori, Department of Neuroscience, University of California, Riverside, CA 92521.**

POSTDOCTORAL POSITIONS. Department of Pathology and Cell Biology—Thomas Jefferson University. Two postdoctoral positions are available to study the gene expression of proteoglycans in human colon cancer and cancer cells. Specific projects include molecular structure and regulation of heparan sulfate proteoglycan gene [*Genomics* 10, 673 (1991)] and the abnormal expression of decorin gene in the tumor stroma [*J.B.C.* 265, 11389 (1990)]. These studies are an integral part of two recently funded NIH grants. Candidates should have a Ph.D./M.D. with a strong background in molecular biology and biochemistry. Send curriculum vitae and names, addresses and telephone numbers of three references to: **Renato V. Iozzo, M.D., Department of Pathology and Cell Biology, Thomas Jefferson University, Room 249 Jefferson Alumni Hall, 1020 Locust Street, Philadelphia, PA 19107-6799. Telephone number: 215-955-2208; FAX number: 215-923-2218. Equal Opportunity Employer.**

Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

MIAMI BIO/TECHNOLOGY WINTER SYMPOSIUM

19 to 24 January 1992, Miami
Issue date: 3 January 1992

HPCE

9 to 13 February 1992, Amsterdam
Issue date: 24 January 1992

ASBMB

10 to 17 February 1992, Houston
Issue date: 31 January 1992

Society of Toxicology

23 to 27, February 1992, Seattle
Issue date: 14 February 1992

Your classified ad will enjoy BONUS DISTRIBUTION at these events.

Deadline for line classified ads: 15 days prior to issue date at 10:00 a.m. Call for display ad deadlines.

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

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Research Microbiologist

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We are currently seeking an innovative, results-oriented Research Microbiologist with expertise in microbial polymers for our Neenah, Wisconsin research facility. Qualifications for this position include demonstrated knowledge and "hands-on" experience with modern techniques in recombinant technology and traditional microbiology procedures. Duties will include both independent research and laboratory support services. The successful candidate will be a team player with strong communication skills. Applicants should have a doctorate degree in molecular biology or microbiology; postdoctoral experience is a plus. This individual will design and execute laboratory experiments, supervise analysis of data, and act as a consultant to diverse product groups within the corporation.

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The Vice President for Research and Dean of The Graduate School is a senior central administrative position with broad responsibilities for stimulating and facilitating graduate education, research, and scholarly activity throughout the University. The Vice President administers the Office of Research and Sponsored Programs, which manages a large and growing funded research program. The Vice President also supervises the technology transfer program and the Office of Research Services Administration which is responsible for the research infrastructure. The Vice President fosters interdisciplinary initiatives and oversees most major research centers. As Dean of The Graduate School the Vice President oversees more than 80 advanced degree programs enrolling approximately 2500 graduate students. The Vice President serves as a member of the President's staff and of the Dean's Council. For full consideration, nominations and applications should be sent by February 1, 1992, to:

Professor Thomas D. Cook
Chair, Search Committee
Northwestern University
2040 Sheridan Road
Evanston, Illinois 60208

Northwestern University is an Equal Opportunity/Affirmative Action Employer and Especially Welcomes Applications from Women and Minorities.

Staff Scientist Skin Biology

ALZA is a leader in drug delivery systems focusing on the development, manufacture and marketing of a wide range of proprietary pharmaceutical products. If you're ready to participate in the most exciting breakthroughs in pharmaceutical therapy, consider applying your talents to ALZA's Skin Biology Group.

As a specialist in cutaneous inflammation research, you will plan and carry out research; develop appropriate in vivo and in vitro models of inflammation; acquire expert knowledge on the toxicology and biophysiology of the skin; and provide solutions to problems encountered in the development of transdermal systems. Ideal candidates will possess a PhD or equivalent in Cell Biology, Physiology or Pharmacology. Up to 2 years of postdoctoral research and experience with cell cultures and animal work are desirable. Strong knowledge of inflammation processes, toxicity mechanisms and the structure and mode of drug actions will make you an even more valuable addition to our team.

Please send your resume to ALZA, Human Resources, 950 Page Mill Rd., P.O. Box 10950, Palo Alto, CA 94043-0802 or call (415) 494-5319. EOE

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CHAIR BIOLOGICAL SCIENCES

Applications and nominations are invited for **Chair, Department of Biological Sciences, Illinois State University** (available July, 1992). ISU has an enrollment of 19,500 undergraduate and 2,400 graduate students and is committed to excellence in both teaching and research. The department offers PhD, MS, and BS/BA degrees. Currently, 31 faculty members pursue research in cell/molecular biology, ecology, evolution, microbiology, genetics, and physiology, and the majority have external funding. The Chair is expected to provide leadership for securing resources, completing the acquisition of a planned Biology/Chemistry building and a field station, developing curricula, and promoting the national/international reputation of the department. Candidates should have a PhD and present evidence of strong leadership and administrative abilities, a distinguished teaching record, and an active research program.

To assure consideration, submit: a) curriculum vitae, b) statement of teaching, research, and administrative goals and philosophy, c) representative publications, and d) names, addresses, and phone and FAX numbers of four references by 14 Feb 1992 to: Biological Sciences Search Committee, College of Arts & Sciences Research Office, Illinois State University, Normal, Illinois 61761-6901



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Toxicology

STUDY DIRECTOR

Short-Term Mammalian Toxicology

The Corporate Toxicology facility of Mobay Corporation located in Stilwell, Kansas, near Kansas City is currently searching for a Toxicologist to handle the following responsibilities:

Planning and directing all short term mammalian toxicity studies.

Scientific interpretation and analysis of study results and technical report preparation.

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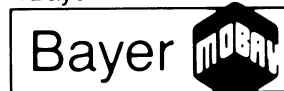
Supervision of technical personnel.

Evaluation of Toxicology data for product safety.

Qualified candidates should possess Ph.D in Toxicology. Experience with industry is desired. Mobay offers a comprehensive benefit package including relocation. Send resume and salary history to: Cheri Simons, c/o Mobay Corporation, P.O. Box 4913, Kansas City, MO 64120.

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Senior Writer

The R.W. Johnson Pharmaceutical Research Institute (PRI) is a world-class pharmaceutical research and development organization that was formed in 1988 to integrate worldwide R&D efforts for various Johnson & Johnson Companies. By 1990, PRI led the industry with FDA approval of 3 new products — PROCIT®, FLOXIN®, and VASCOR®. This success has moved PRI toward its goal of becoming a primary force in the industry and maintaining Johnson & Johnson as the world's largest and most comprehensive provider of health care products.

We currently have a significant career opportunity on the scientific team at our suburban Philadelphia, campus-like facilities. You should be a successful biomedical scientist interested in pharmaceutical development with a PhD in biomedical research or related discipline, and postdoctoral experience. A solid record of research and publications is essential. Excellent verbal and written communications skills, as well as good interpersonal skills are required. As a member of our Regulatory Documentation Group, you will be responsible for gathering and synthesizing data for submission to the FDA plus preparing reports on scientific issues pertinent to ongoing and future projects.

The position supports our important research endeavors and affords opportunity for professional growth. We offer a competitive salary and comprehensive benefits including medical/dental insurance, 401(k) plan, and our LIVE FOR LIFE Wellness Program with on-site fitness center. Ours is a smoke-free workplace.

No phone calls please. We will only respond to those who meet the above qualifications. Please send your resume, including salary requirements, to: Mr. Michael Urdanick, R.W. Johnson Pharmaceutical Research Institute, Welsh & McKean Roads, Spring House, PA 19477. An Equal Opportunity Employer, M/F



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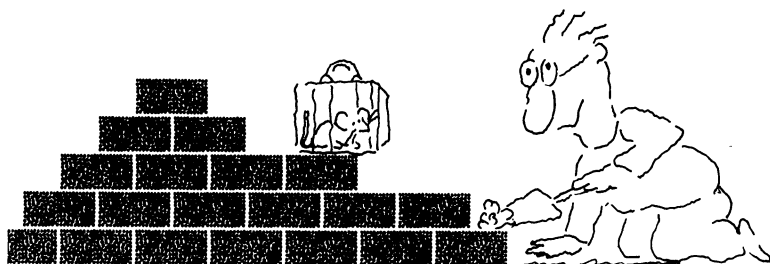
Postdoctoral Fellow/ Associate Scientists

Positions are available in a laboratory studying the mechanism of transcription and the regulation of gene expression, with specific focus on the mammalian ribosomal RNA genes. The positions require a Ph.D. with experience in protein chemistry and/or microbiology. Candidates for the position of associate scientist should have at least 32 years or relevant postdoctoral training. Experience in tissue culture methodologies would also be desirable.

The Research Center is housed in a modern, completely equipped facility, within convenient driving distance of New York City, Philadelphia and Washington, D.C. and several major universities, yet it still offers the benefits of a small town environment. Interested candidates should send copies of their curriculum vitae and the names of three references to: Human Resources Dep't (LR) Geisinger Clinic, Danville, PA 17822-3024. Equal Opportunity Employer M/F/H/V

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The Global Weekly of Research
SCIENCE

Markey Fellows for graduate study programs in La Jolla Predoctoral Training in Cellular and Molecular Biology

A new fellowship program for graduate studies in Cellular and Molecular Biology, supported by the Lucille P. Markey Charitable Trust, has been organized at UCSD in La Jolla. The program will provide outstanding students with unique research and training opportunities at the University of California at San Diego, the Salk Institute, the Scripps Research Institute and the La Jolla Cancer Research Foundation.

This innovative program will be integrated with already existing UCSD graduate student training programs in Biology, Biomedical Sciences, Chemistry (Biochemistry), Molecular Pathology and Neurosciences.

Students accepted in this new program will receive full support as Markey fellows and will have lateral mobility from one program to another during the first year of their studies.

Interested students should contact the Division of Cellular and Molecular Medicine at UCSD, telephone 619/534-7710, FAX 619/534-8549 to receive more information about the programs and the application procedure.



THE UNIVERSITY
OF ADELAIDE
SOUTH AUSTRALIA

Applications are invited from both women
and men for this position:

PROFESSOR OF ENVIRONMENTAL STUDIES (Tenurable)

(Ref: 7442) in the MAWSON GRADUATE CENTRE FOR ENVIRONMENTAL STUDIES. This position has been created from the Vice-Chancellor's Development Fund following an external review of the Centre. As well as being the Director of the Mawson Graduate Centre, the incumbent will have academic oversight of the Mawson Collection housed in the University of Adelaide.

The Centre offers a Postgraduate Diploma and a Master of Environmental Studies degree, based on a combination of course-work and research and a PhD by research. The Professor will be expected to initiate a review of the structure and curriculum of the Centre's degrees. The University is also developing environmental studies and science at the undergraduate level through various faculties including Arts, Science and Agricultural and Natural Resource Sciences, and the Professor will be expected to contribute academic leadership to these new courses.

The Mawson Centre has a current enrolment of 85 postgraduate students from a wide range of academic backgrounds. Its courses are integrated by a perception of environmental studies as transdisciplinary and problem-solving, with a distinctive methodology and a developing philosophical base. It conducts research on general environmental problems, and also on subjects of particular interest to clients such as the South Australian Department of Environment and Planning, National Parks and Wildlife, the SA Waste Management Commission, local governments, the Murray Darling Basin Ministerial Council, and major industrial corporations. An emphasis is placed on team work in research and on interaction between students with complementary expertise.

To direct the Centre the University of Adelaide seeks a Professor who has achieved distinction in teaching and research in the field of environmental studies. The successful candidate will be expected to enjoy the confidence of the scientific community. This candidate will also be expected to enjoy the confidence of the professional community with which the Centre is increasingly linked. The Professor's responsibilities as director will include convening the Centre's Board, which is broadly representative of environmentalists across the University as well outside it, and includes members from the faculties of Agricultural and Natural Resource Sciences, Architecture and Planning, Arts, Economics, Law, Medicine and Science.

The position is available from 1 January 1992.

Further information concerning the duties of the position may be obtained from Dr D Bennett, Acting Director of the Mawson Graduate Centre for Environmental Studies, telephone (61 8) 228 5835.

It is University policy to encourage women to apply for appointment to tenurable academic appointments. Holders of full-time tenured or tenurable academic appointments have the opportunity to take leave without pay on a half-time basis for a specific period of up to ten years when this is necessary for the care of children.

INFORMATION about the general conditions of appointment and selection criteria should be obtained from the Director, Personnel Services at the University.

SALARY per annum: AUS\$73,800 x 1 - AUS\$77,900

APPLICATIONS, IN DUPLICATE, quoting reference number 7442 should address the selection criteria and give full personal particulars (including whether candidates hold Australian permanent residency status), details of academic qualifications and names and addresses of three referees should reach the Director, Personnel Services at the University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Telex UNIVAD AA 89141, Facsimile (61 8) 223 4820 not later than 31 January 1992.

The University reserves the right to make enquiries of any person regarding any candidate's suitability for appointment, not to make an appointment or to appoint by invitation.

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Molecular Biology and Molecular Recognition

A newly formed department of Molecular Diagnostics is seeking highly qualified scientists to fill several positions in the Protein Engineering Group. The main goal of the research program is to develop methods to design and construct binding surfaces or epitope mimics using peptidic or nucleic acid frameworks.

We are looking for candidates who are keenly interested in advancing understanding of molecular recognition, and who are creative, dedicated and enthusiastic. The department provides an excellent opportunity for your career development, including state-of-the-art facilities and equipment, the encouragement to publish in scientific journals, and possibilities of collaborations with research groups within the company, and outside of Abbott.

Positions are available in these areas for Ph.D. level candidates with post-doctoral experience.

Molecular Modeling - Primary research activities include structure-function studies and modeling of antibody-antigen complexes. We require background in crystallography, NMR or theoretical chemistry as well as experience in studying proteins from X-ray or NMR structures and computational proficiency in modeling peptides or proteins.

Antibody Engineering - Requires background in rational design, molecular cloning and expression of recombinant immunoglobulin genes and evaluation of properties of antibodies.

Molecular Biology - Must have experience in structure activity studies of proteins through recombinant DNA approaches, construction of gene libraries and screening of clones. Working knowledge of mammalian cell expression is a plus.

Protein Purification - Requires 3 or more years' experience in protein purification and characterization. M.S. level candidates with a demonstrated record of achievement will be considered.

For the above positions, reply to Job #52189.

Associate Scientist/Molecular Biology - Requires a B.S./M.S. level person with 1+ year(s) of laboratory experience and work background in several of these techniques: gene cloning, expression, site-directed mutagenesis, PCR, DNA sequencing, construction of gene libraries, gel electrophoresis, protein chromatography, HPLC. Reply to Job #52188.

• • • • •

Molecular Virologist

You will have responsibility for tissue cultures, virus production, purification, biochemical characterization and application of reagents to diagnostic assays. Requires a Ph.D., 5 years post-doctoral and supervisory experience and background in clinical virology and infectious disease. Reply to Dept. 90-D.

Our state-of-the-art facility is located in an attractive suburb 30 miles north of Chicago. Compensation is competitive and our generous benefits include profit sharing. To apply, send your resume and a letter indicating appropriate Job#/Dept. Code, to: Ann Ribbens, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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Department of Bioengineering

The Department of Bioengineering at the University of Pennsylvania seeks applications for the faculty at the assistant professor level. Applicants will be expected to teach bioengineering courses at both the undergraduate and graduate levels and to conduct research in one or more of the following areas: Bioelectric Phenomena, Biomaterials, Biomechanics, Sensory/Neuroengineering, Cardiovascular Mechanics and Hemodynamics, Respiratory Mechanics and Transport, Rehabilitation Engineering.

Applicants must have a Ph.D. in Engineering or equivalent. Applicants should send a curriculum vitae, including names and phone numbers of at least three references, to:

Dr. Lawrence E. Thibault, Chairman
Department of Bioengineering
University of Pennsylvania
240 S. 33rd St., Suite 120
Philadelphia, PA 19104-6392



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SKELETAL RESEARCH SCIENTIST

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity for a Skeletal Research Scientist to join its Cellular Biochemistry and Immunology Department. The selected individual will prepare skeletal specimens for microscopic analysis, paraffin embedding, and plastic embedding of tissue, as well as assist in and conduct skeletal research studies in osteoporosis and arthritis. He/she will conduct hard tissue preparation (decalcified and undecalcified) and/or fresh non-embedded and plastic embedded specimens. The incumbent will also develop skills in use of image analysis for evaluation of skeletal tissue changes.

Qualifications for the position include a BS/BA in Biology, Medical Technology, or a related field, with one to three years of histology lab experience. An MS degree in a related field is preferred. Knowledge and experience with computers for data analysis is required. Candidates must not have a history of asthma or any drug allergies.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits package including relocation assistance, as well as a stimulating and challenging work environment. For prompt consideration, please submit your resume to: Nancy Hasson, Employment Administrator, #H0194A, SmithKline Beecham Pharmaceuticals, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

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SENIOR TOXICOLOGIST



The **Environmental Defense Fund**, a national, nonprofit environmental research and advocacy organization, seeks a Senior Toxicologist. EDF's

scientists, attorneys, and economists work together to craft innovative solutions to critical problems in environmental health.

We seek a scientist with an established reputation for excellence in research and teaching, exceptional communication skills, and understanding of a broad range of environmental health and policy issues. Requirements include a Ph.D., M.D., or equivalent degree, and several years of relevant experience.

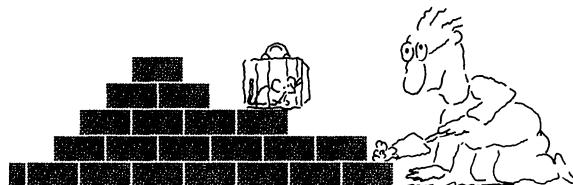
This position, located in Washington, D.C., offers an unlimited opportunity to work on key issues with colleagues from the advocacy sector, government, industry, and academia. We may consider a joint appointment with a nearby research institution. EDF offers competitive salaries and excellent benefits.

Send resume and technical and non-technical writing samples to:

Karen Florini
Environmental Defense Fund
1616 P Street, NW Suite 150
Washington, DC 20036

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Washington, DC 20005 **SCIENCE** The Global Weekly of Research

THIRD INTERNATIONAL SYMPOSIUM ON IMMUNOTOXINS SHERATON WORLD RESORT ORLANDO, FLORIDA JUNE 19-21, 1992

SESSIONS AND SESSION CHAIRMEN

1. **Structure of Peptide Toxins:** David Eisenberg, Julian Davies, Jon Robertus, John Collier.
2. **Toxin Physiology Process and Workshops:** Michael Lord, David FitzGerald, Sjur Olsnes, Ira Wool.
3. **New Immunotoxins:** John Murphy, Ira Pastan, Philip Thorpe, John Lambert.
4. **Preclinical Pharmacology Posters and Workshops:** Edward Wawrzynczak, Thomas Griffin, Dan Vallera, Richard Youle, Albert LoBuglio.
5. **Clinical Trials:** Vera Byers, Walter Blattler, Ellen Vitetta, Fred LaMaistre.
6. **Critical Issues in Immunotoxin Development Workshop:** Marc Whitlow, Dick Svrluga, Leslie Misrock, Curtis Scribner, Lawrence Greenfield, Allen Oliff.

For Information Contact:

Arthur E. Frankel, M.D.
Florida Hospital Cancer and Leukemia Research
Center
616 E. Altamonte Drive, Suite 100
Altamonte Springs, Florida 32701
(407) 339-1004

Dept. of Environmental Sciences ETH Zurich

Several positions are open as of October 1991 in the newly formed group for *Experimental Ecology* within the *Institute for Terrestrial Ecology*. Research interests focus on terrestrial systems, including studies of host-parasite relationships, and seek to integrate various levels of ecological analysis, from individuals to populations and communities, and to balance theory with experimental work in the lab and field.

1 Assistant (corresponding to assistant prof.) in *Population Biology/Evolutionary Ecology*, and *1 Assistant* in *Population/Evolutionary Genetics*. Positions are scheduled for a period of 2-6 yrs; subject to review after this period permanent status may be awarded. For successful candidates postdoctoral experience and the ability to interact within the group and with other faculty in the ETH is an advantage. He/she should have a proven research record. Teaching includes participation in undergraduate courses and development of own courses in the field of expertise, mainly for students from environmental sciences.

1 Postdoctoral position for applicants from any of the above areas and/or with interest in developing own research in these fields. The successful candidate will have shown good promise to develop his/her field within the group's common interests. The position is on a 1-3 yr basis. Participation in teaching or lecturing in own field of expertise would be welcome.

1-2 Ph.D. positions for students interested in working for a doctoral degree in any of the above fields.

Applications should be accompanied by C.V., statement of interests, publication list, names of referees or any other material considered helpful, and submitted no later than December 15 to Mr. K. Zurbuchen, Personalabteilung, ETH-Zentrum, CH-8092 Zürich, Switzerland. Address inquiries to: Prof. P. Schmid-Hempel, ETH-Zentrum, Institut für Terrestrische Oekologie SWW, CH-8092 Zürich, Switzerland. Ph: 01-733 60 48.

BOSTON UNIVERSITY DIRECTOR, SCHOOL OF PUBLIC HEALTH

Boston University invites nominations/applications for Director of its School of Public Health. The Director is the chief academic and administrative officer of the School.

The School includes five academic departments: Social and Behavioral Sciences, Environmental Health, Epidemiology and Biostatistics, Health Services, Health Law, and an associated Center for International Health. There are approximately 50 full-time and 200 part-time faculty. 400 students are matriculated in programs leading to MPH and PhD degrees and various certificates. The School has a close relationship with the School of Medicine.

Nominations/applications including curricula vitae should be sent to: **Dr. Norman G. Levinsky, Chairman, Search Committee, Boston University Medical Campus, Boston, MA 02118.**

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Natural Sciences and Engineering
Research Council of Canada

Conseil de recherches en sciences
naturelles et en génie du Canada

REGISTER OF CANADIANS STUDYING ABROAD

The Natural Sciences and Engineering Research Council of Canada (NSERC) maintains a Register of Canadians who are enrolled in postgraduate degree programs or who hold postdoctoral appointments abroad, and whose fields of study/research are in the natural sciences or engineering.

The purpose of the Register is to help students and fellows abroad to find employment in Canada. It does this by bringing their skills to the attention of Canadian employers who request information on appropriately qualified registrants. Contact with the selected registrants is then up to the employer.

This service is free to all participants.

Eligible Canadian students and postdoctoral fellows, and interested employers in Canada who wish further information or registration forms should contact:

Administrator

Register of Canadians Studying Abroad
Natural Sciences and Engineering
Research Council of Canada
200 Kent Street
Ottawa, Ontario, Canada K1A 1H5
Telephone: (613) 995-6060

Canada



Post-Doctoral Fellowship

STRUCTURE-BASED DRUG DESIGN MACROMOLECULAR NMR

BioCryst, a leading pharmaceutical company in the field of rational structure-based drug design, is seeking a post-doctoral fellow in the field of macromolecular NMR spectroscopy to join our team of X-ray crystallographers, molecular modelers, and synthetic chemists on a number of exciting drug design projects.

We are interested in dynamic, innovative Ph.D. chemists or biochemists who have extensive experience in multi-dimensional NMR pulse techniques, distance geometry calculations, and molecular dynamics refinement as applied to the solution of protein or nucleic acid three-dimensional structures. A proven track record in structure solution is required. As some of our projects involve determining the protein-bound conformations of small molecules, we are especially interested in persons with experience in heteronuclear-edited NOESY and COSY measurements. Equipment available includes Bruker AM600 and AM400 spectrometers, and ESV-10, PS350, and VAX 3600 computers. This post-doctoral position is for one year; the position may be extended upon mutual consent, and this may become a permanent position.

BioCryst offers truly excellent benefits and living conditions in Birmingham, Alabama, chosen as one of America's Most Livable Cities. For confidential consideration, please send your resume and the names of references to:

BioCryst, Inc.
Human Resources
1075 13th St. South
Birmingham AL 35205
BITNET: BORHANI@UABCMC

Research Manager & Scientists

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- Medical microbiology
- Immunochemistry
- Molecular biology

The position of Research Scientist requires a Ph.D. and 0-2 years postdoctoral research experience. Applicants for Research Manager must have a Ph.D. and a proven record of postdoctoral and research management experience.

We offer competitive salaries and a full range of benefits. Please send your resume, noting the position of interest, to:

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OPHIDIAN Pharmaceuticals
2800 S. Fish Hatchery Rd.
Madison, WI 53711

POSITIONS OPEN

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE. Position immediately available to conduct research on lipoprotein metabolism and atherosclerosis, using molecular biological approaches. Send curriculum vitae to: **Dr. A. Tall, Department of Medicine, Columbia University, New York, NY 10032.**

PREDOCTORAL AND POSTDOCTORAL TRAINEES BIOLOGICAL BASIS OF AGING AND ALZHEIMER'S DISEASE UNIVERSITY OF WASHINGTON

Applications are invited for participation in genetic, cellular and molecular research supported by an NIH Training Grant, an Alzheimer's Disease Research Center, a program-project on proliferative homeostasis and genetic research projects utilizing various organisms. Graduate sponsorship via an interdisciplinary cellular molecular biology program or individual departments. Apply to: **Dr. G. M. Martin, Pathology, SM-30, University of Washington, Seattle, WA 98195. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS at the University of California, San Francisco. Positions available immediately to study molecular biology of hormone expression and action, patch-clamping, and expression cloning of receptors: (1) molecular basis of signal transduction by the parathyroid hormone receptor, (2) PTH-related protein (PTHrP) as a differentiation factor, (3) regulation of PTHrP gene expression in tumor cells, (4) patch-clamping of parathyroid cells and expression cloning of cell surface molecules. Prefer experience in molecular biology or electrophysiology. Please send curriculum vitae and three references to: **D. Shoback, M.D., R. A. Nissenson, Ph.D., or G. J. Stremler, M.D., Endocrine Research Unit (111N), VA Medical Center, 4150 Clement Street, San Francisco, CA 94121. An Equal Opportunity/Affirmative Action Employer.**

GRADUATE FELLOWSHIPS CENTER FOR THE STUDY OF EVOLUTION AND THE ORIGIN OF LIFE (CSEOL) UCLA

From the origin of the cosmos,
to the beginnings of life,
to the advent of *homo sapiens*.

CSEOL invites applications for five graduate fellowships for 1992-93. In addition to support provided Fellows by UCLA departments, CSEOL will grant each fellow a stipend of \$5000 per year, for each of the first 2 years of graduate study, with no teaching or other duties. Fellows are included in a select group of graduate students invited to interact with center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution—of the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1992-93 include (1) biochemical evolution and molecular phylogeny; (2) the origin and early history of life; and (3) interrelated environmental-biotic evolution. Faculty are members of the UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry and Biochemistry, Computer Science, Earth and Space Sciences, Geography, and Microbiology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably by 15 January 1992) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

CSEOL Fellows Committee
Geology Building, Room 5687
University of California, Los Angeles
Los Angeles, CA 90024
Telephone: 310-825-1170
FAX: 310-825-0097

NEUROPATHOLOGY FELLOWSHIP

Starting July 1992 in a 2-year program integrating diagnostic and research training for Board eligibility. Preference for candidates with completed training in anatomic pathology or neurology. Contact: **Scott VandenBerg, M.D., Ph.D., Box 214, University of Virginia (UVA) Health Sciences Center, Charlottesville, VA 22908. UVA is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

PRE- AND POSTDOCTORAL FELLOWSHIPS available on an NIH-funded training grant on Regeneration and Development of CNS. Training in a highly interactive environment can be obtained in all aspects of microscopy and imaging, intracellular recording, patch clamping, energy transfer techniques, gene cloning and sequencing, transplantation techniques, tissue culture and behavioral neurobiology. Faculty include Drs. Peter D. Chantler, Timothy J. Cunningham, Itzhak Fischer, Michael E. Goldberger, Forrest A. Haun, Pat R. Levitt, E. Hazel Murphy, Marion Murray, Martha C. Nowycky, Martin J. Pinter and Alan R. Tessier. Special restrictions apply to federal training grants: *U.S. citizenship or proof of permanent residency required.* Send curriculum vitae and names of references to: **Dr. E. Hazel Murphy, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS

Harvard Medical School, Psychiatry, Massachusetts Mental Health Center (MMHC); M.D.'s, Ph.D.'s for 2-year independent clinical research training projects under preceptor, seminar, courses. Areas: biological (MRI's, ERP's, sleep, schizophrenia, psychopharmacology) and social/developmental (families, adolescent/young adult development). NIMH-funded stipends: \$18,600 to \$32,300. Deadline: 1 March 1992. Contact: **K. Benes, MMHC, 74 Fenwood Road, Boston, MA 02115, telephone: 617-734-0031.**

KARNOFSKY POSTDOCTORAL FELLOWSHIP. St. Jude Children's Research Hospital, a premier center for biomedical research and catastrophic diseases of children, is pleased to offer the Karnofsky Memorial Fellowship in Cancer Research to candidates with a Ph.D. or M.D. degree. The Karnofsky Fellowship honors the memory of Dr. David A. Karnofsky, a former member of the St. Jude Children's Research Hospital's Scientific Advisory Board and an internationally recognized authority on the importance of chemotherapy in the treatment of cancer. The Karnofsky Fellowship is available to investigators who are beyond the junior level of accomplishment and wish to gain further experience and expertise in one of the biomedical research specialties available at St. Jude. The fellowship appointment is for up to 3 years and is based on merit, recommendations and promise of a productive career in biomedical research. Stipends are highly competitive.

- Application deadline: 1 March 1992.
- Award notification: 15 April 1992.
- Beginning date: 1 July to 1 September 1992.

Send inquiries to:

Allan Granoff, Ph.D., Deputy Director
St. Jude Children's Research Hospital
P.O. Box 318
Memphis, TN 38101

Equal Employment/Affirmative Action Employer.

POSTDOCTORAL FELLOW

Position available fall 1991, to investigate development of the mechanisms regulating catecholamine secretion in fetal adrenal medulla. Includes study of neurotransmitter receptors, signal transduction mechanisms and regulation of gene expression of catecholamine biosynthetic enzymes. Experience in molecular biology is required. *Candidate should be U.S. citizen or permanent resident.* Applicants submit letter stating interest, curriculum vitae and names of three references: **C. Y. Cheung, Department of Reproductive Medicine (0802), University of California, San Diego, La Jolla, CA 92093-0802. The University of California San Diego is an Affirmative Action/Equal Opportunity Employer.** Salary related to rank and step of appointment is within the established salary schedule of the University of California San Diego School of Medicine.

POSTDOCTORAL FELLOW

Unique opportunity for a recent Ph.D. trained in cell and molecular biology to examine the mechanisms of PDGF signal transduction at the single cell level using video microscopy and molecular biology techniques. Send curriculum vitae and three references to: **Dr. Brian Herman, Department of Cell Biology and Anatomy, University of North Carolina, CB# 7090, 232 Taylor Hall, Chapel Hill, NC 27599. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

Director

Human Studies Division

Health Effects Research
Laboratory
Research Triangle Park, NC



**U.S.
Environmental
Protection
Agency**

An Equal Opportunity Employer.

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Director, Human Studies Division, Health Effects Research Laboratory (HERL). This position is located in Chapel Hill, NC, and is a permanent, full-time position with a salary range of \$61,643 to \$80,138 per annum commensurate with qualifications. Additional salary incentives may be available.

HERL has a staff of about 250, over half of whom hold doctoral level degrees. The laboratory has a diverse program which includes in vitro, animal, human, clinical and epidemiological research designed to address issues related to the health effects of air and water chemical and biological pollutants.

The Human Studies Division (HSD) is a multidisciplinary program organized into two branches, Clinical Research and Epidemiology, with a combined EPA staff of 35 and approximately 75 on-site contractor personnel. The Division is a focal point for planning, conducting, coordinating, supporting, and evaluating a program of clinical and epidemiological investigations to improve the understanding of human health risks associated with environmental pollution. The increasing Agency emphasis on the need for human data is resulting in the expanded support and development of the epidemiology program to further complement our traditionally strong clinical research program. The latter is recognized as one of the leading programs in the world for the conduct of research on controlled human exposure to environmental agents and assessment of associated health effects. Support for human studies is further reflected in the current construction of a state-of-the-science, \$29 million Environmental Health Research Facility that will be located on the University of North Carolina Campus in Chapel Hill, and will house the entire Human Studies Division. The program includes

both intramural investigations and extramural arrangements with universities, industry, private research institutions, and other government agencies. Adjunct appointments with neighboring academic institutions are encouraged and access to graduate/postdoctoral fellows is excellent. The primary responsibilities of the Director are to direct and manage the program. This includes scientific and managerial leadership of the program: developing the program to meet the evolving needs of EPA, presenting the program, developing and managing budgets, supervising the staff, directing the progress of the program, and ensuring the scientific quality and productivity of the program.

The preferred candidate for this position would possess the following qualifications:

1. Advanced degree in a biological or medical discipline or epidemiology with at least six years of professional experience in any of these areas. Applicable graduate coursework may be substituted for a portion of the required experience.
2. Experience as a supervisor of a scientific/professional staff.
3. Recognized scientific expertise as evidenced by multiple publications in peer-reviewed literature and presentations at national and international meetings/panels.
4. Proven ability to provide leadership in directing the development and progress of a creative and effective multidisciplinary human research program.
5. U.S. citizenship is required.

Forward curriculum vitae and names of three references prior to March 1, 1992 to: **Dr. Harold Zenick, c/o Dorothy Carr, HRMD (MD-29), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.**

Chief

Epidemiology Branch
Human Studies Division

Health Effects Research
Laboratory
Research Triangle Park, NC



**U.S.
Environmental
Protection
Agency**

An Equal Opportunity Employer.

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Chief, Epidemiology Branch, Human Studies Division, Health Effects Research Laboratory (HERL). This position is located in Chapel Hill, NC, and is a permanent, full-time position with a salary range of \$52,406 to \$80,138 per annum commensurate with qualifications. Additional salary incentives may be available.

HERL has a staff of about 250, over half of whom hold doctoral level degrees. The laboratory has a diverse program which includes in vitro, animal, human, clinical and epidemiological research designed to address issues related to the health effects of chemical and biological pollutants. The epidemiology program develops methods and models and conducts studies to address issues related to the assessment of human exposures and the potential health effects and regulatory implications.

Increasing Agency emphasis on the need for human data has led to the further support and development of environmental epidemiology within the Agency with the HERL Branch as the focal point. Thus, in addition to its historically strong program in the areas of air and water pollution, new major program activities are expanding and/or evolving including health effects of ambient ozone exposure, status and trends in human exposure and effects, and cancer/noncancer health risks in pesticide applicators and their families. It is anticipated that the Branch Chief will play the lead role in the further definition of the environmental epidemiology research agenda for the Agency. Moreover, building has commenced on a \$29 million Environmental Health Research Facility that will be located on the University of North Carolina campus in Chapel Hill and will house the entire Human Studies Division.

The program includes both intramural investigations and extramural arrangements with other governmental and nongovernmental organizations. The incumbent coordinates and implements the epidemiology program and in this capacity directs the research activities of the branch, maintains/conducts own active research program, and serves as the principal scientific advisor to the Division Director. The incumbent will serve at the Agency's focal point in representing its epidemiological program at the national and international level. Adjunct appointment(s) with neighboring academic institutions is encouraged and access to graduate students and postdoctoral fellows is excellent.

The preferred candidate for this position would possess the following qualifications:

1. Advanced degree in a biological or environmental discipline with at least five years of professional experience related to epidemiology. Applicable graduate coursework may be substituted for a portion of the required experience.
2. Experience as a supervisor of a scientific/professional staff.
3. Recognized scientific expertise in epidemiology as evidenced by multiple publications in peer-reviewed literature and invitations to participate in national/international meetings/panels.
4. Ability to provide leadership in directing the development and progress of a creative and effective research program.
5. U.S. citizenship is required.

Forward curriculum vitae and names of three references prior to March 1, 1992 to: **Dr. Harold Zenick, c/o Dorothy Carr, HRMD (MD-29), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.**

POSITIONS OPEN

GRADUATE AND POSTDOCTORAL FELLOWSHIPS EVOLUTIONARY MECHANISMS

Six core faculty (V. Chandler, L. Heisler, R. Lande, M. Lynch, E. Selker, and F. Stahl) in the Department of Biology, University of Oregon, are administering a 5-year NSF training grant for studies on Genetic Mechanisms of Evolution. We are seeking highly qualified postdoctoral candidates for Research Associate positions, and graduate student candidates for Graduate Research Fellow positions. A sincere commitment to understanding of both molecular genetics and evolution at the phenotypic level is an essential requirement for appointment. The initial deadline for appointments is 1 February 1992; thereafter, applications will be reviewed about every 6 months. Applicants should submit a brief summary of interests, curriculum vitae, and names, addresses, and telephone numbers of three references. *We are especially interested in minority recruitment.* Further information can be obtained from any of the faculty. Send applications to: **Evolutionary Mechanisms Training Group, Department of Biology, University of Oregon, Eugene, OR 97403.** *The University of Oregon is an Equal Opportunity, Affirmative Action Institution, committed to cultural diversity.*

DOCTOR OF ARTS IN BIOLOGICAL SCIENCES, FELLOWSHIPS are available for persons interested in the D.A. degree in biological sciences. The program stresses preparation for undergraduate teaching at colleges and universities. Applicants must hold a master's degree in some area of biology. Deadline for receipt of application is 1 March 1992. For more information contact: **Chairman D. A. Committee, Department of Biological Sciences, Idaho State University, Pocatello, ID 83209.** *An Equal Opportunity Employer.*

MOLECULAR EYE DISEASE RESEARCH BASCOM PALMER EYE INSTITUTE UNIVERSITY OF MIAMI

RESEARCH FELLOW/ASSOCIATE position in molecular genetics of hereditary eye diseases—retinitis pigmentosa, gyrate atrophy, and retinoblastoma. State-of-the-art "forward"/"reverse" genetic approaches to isolating and studying genes—gene cloning/mapping, mutational/transgenic analysis. Ph.D. and/or M.D. required; experience in molecular biology preferred. Send curriculum vitae, names, addresses, and telephone numbers of three references to: **George Inana, M.D., Ph.D., Director, Laboratory of Molecular Genetics, Department of Ophthalmology, University of Miami School of Medicine, P.O. Box 016880, Miami, FL 33101.** *An Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS in endocrinology, metabolism, and diabetes for M.D. or Ph.D. graduates are available at Emory University School of Medicine utilizing eleven training faculty in six basic and clinical departments. *Must be U.S. national or permanent resident.* M.D. applicants must have U.S. residency experience. Send curriculum vitae, statement of research and career objectives, and two letters of reference to: **Lawrence S. Phillips, M.D., Program Director, Emory University School of Medicine, 69 Butler Street, S.E., Atlanta, GA 30303.** *An Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH FELLOWSHIPS. At NSF Science and Technology Center for Biological Timing in biophysics, biomathematics, and nonlinear systems modeling, as applied to neural circuits, biological clocks, pulsatile hormone secretion and clearance, feedback control, etc. Contact: **J. D. Veldhuis, Box 202, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** *An Equal Opportunity Employer.*

National Institutes of Health, **POSTDOCTORAL RESEARCH POSITION** available for M.D. or Ph.D. with experience in biochemistry, molecular biology, or cell physiology. Excellent opportunity to study osmotic regulation and/or regulation of epithelial transport in the Laboratory of Kidney and Electrolyte Metabolism. Candidate must have less than 3 years of research training beyond the doctoral degree. *U.S. citizenship is not required.* Send curriculum vitae and names of three references to: **Dr. Maurice Burg, Building 10, Room 6N307, CODE: 3187, Bethesda, MD 20892.** *NIH is an Equal Opportunity Employer.*

POSITIONS OPEN



POSTDOCTORAL RESEARCH ASSOCIATES

ARS is seeking applicants for three postdoctoral research associate positions at the Avian Disease and Oncology Laboratory, East Lansing, Michigan in the areas of: (1) molecular analysis of a retrovirus-mediated mutation of a sex-linked gene; (2) use of cellular immunology and molecular DNA techniques to identify viral epitopes; and (3) molecular analysis of a putative viral oncogene. A Ph.D. within the past 3 years is required. Also required, experience and/or education in molecular biology for positions 1 and 3, and cellular immunology or immunology for position 2. Temporary appointments, not to exceed 2 years; benefits available. Salary commensurate with experience, GS-11/12 (\$32,423 to \$38,861). Please send curriculum vitae and names of three references to: **Dr. E. J. Smith (position 1), Dr. H. D. Hunt (position 2) or Dr. L. F. Lee (position 3), USDA-ARS, Avian Disease and Oncology Laboratory, 3606 East Mount Hope Road, East Lansing, MI 48823 or telephone: 517-337-6828.** Applications must be marked 2N017 and must be received by 1 February 1992.

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POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS. Expanding laboratory. Methods include: studying cell-molecular basis of smooth muscle/nerve interactions associated with growth and inflammation. Need two individuals with expertise in histochemistry and neuropharmacology. Actively engaged in cell culture, retrograde axonal tracing, immunocytochemistry, patch clamp/extracellular electrophysiology, immunosays, and molecular biological techniques with particular focus on growth factors and cellular signaling involving Ca^{2+} . Funded positions with competitive salaries available for Ph.D. or M.D. Send curriculum vitae, cover letter, and names of three references to: **William D. Steers, M.D., Department of Urology, Box 422, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** Telephone: 804-924-9107. FAX: 804-982-3652.

POSTDOCTORAL RESEARCH BIOENGINEER to conduct research on brain potentials in humans evoked by auditory stimuli. To determine the effects of skull conductivity and shape upon solutions to the inverse problem; unfold overlapped waveforms from high stimulus repetition rates. Working knowledge of electrical impedance tomography and computer programming, and theoretical knowledge of computer finite and boundary element methods are required. Minimum Ph.D. in bioengineering or related field. Salary: \$34,248 a year. Job site interview, Mill Valley, California. Send résumé with ad to: **Job #FC17206, P.O. Box 9560, Sacramento, CA 95823-0650** no later than 19 January 1992.

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITION

A position is available for an individual with a strong commitment to research to study molecular genetics and enzymology of recombination and recombinational repair in a Gram-positive coccus. Competitive salary and excellent benefits package. Send curriculum vitae and representative publications (if available) to: **Dr. Kenneth W. Minton, Department of Pathology, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.**

A major university in southwestern Ohio has an opening for a **RESEARCH ASSOCIATE.** Job duties include the expression and the detection of the ion channels using oocytes system. Exogenous genes should be microinjected into oocytes under RNase-free conditions and the expression should be detected by either two-electrode voltage-clamp or single channel patch technique. The applicant must have demonstrated the ability to work independently (to be verified by employers). A Ph.D. in biology/pharmacology with at least 2 years of experience in physiology is required. Salary is \$30,000 per year, 40 hours per week, 8:00 a.m. to 5:00 p.m., Monday to Friday. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO# 1230807, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE.

To investigate the kinetics and mechanisms of enzymatic reactions [see *Biochemistry* 30, 10849 (1991)]. Applicants should have a doctoral degree in chemistry or biochemistry. Flexible starting date: Send résumé and two letters of recommendation to: **Dr. R. Pollack, Department of Chemistry and Biochemistry, University of Maryland Baltimore County (UMBC), Baltimore, MD 21228-5398.** *UMBC is an Affirmative Action Employer. Applications from minorities, women and disabled candidates are encouraged.* Applications will be accepted until a suitable candidate is found.

POSTDOCTORAL RESEARCH OPPORTUNITY: AVAILABLE NOW

Join a successful research program studying adeno-associated virus as a eukaryotic viral vector for potential use in human gene therapy. This position offers an excellent research environment in a most livable city; requires a strong background in recombinant DNA technologies, cell culture and small animals. Send curriculum vitae and names of three references to: **Dr. Richard Jude Samulski, University of Pittsburgh, Biological Sciences, 269 Crawford Hall, Pittsburgh, PA 15260.** *Equal Opportunity Employer.*

RESEARCH ASSISTANT

Research assistant position is available in the Department of Surgical Research at the University of Virginia Health Sciences Center. Research areas include vascular physiology, thoracic transplantation, and cardiovascular clinical studies. M.S. degree or higher and expertise in computer application is required. Send curriculum vitae to: **Irving L. Kron, M.D., Department of Surgery, Box 181, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE I. For research and publication addressing relationships between ceramics, ceramic precursors, and electrochemistry causing reflection-absorption FTIR (Fourier-transform infrared) electrochemical methods, TGA/DTA (thermal gravimetric analysis/differential thermal analysis), x-ray diffraction, and other traditional and nontraditional ceramics characterization techniques. Forty-hour week. Salary: \$22,000 per year. Ph.D. in analytical chemistry required. Send résumé to: **New Mexico Department of Labor, Cost Center 1001, 501 Mountain Road, N.E., Albuquerque, NM 87102, Job Order No. 334071.**

A major university in southwestern Ohio has an opening for a **RESEARCH ASSOCIATE.** Job duties include the expression and the detection of the ion channels using oocytes system. Exogenous genes should be microinjected into oocytes under RNase-free conditions and the expression should be detected by either two-electrode voltage-clamp or single channel patch technique. The applicant must have demonstrated the ability to work independently (to be verified by employers.) A Ph.D. in biology/pharmacology with at least 2 years of experience in physiology is required. Salary is \$30,000 per year, 40 hours per week, 8:00 a.m. to 5:00 p.m., Monday to Friday. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO# 1230807, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

ANALYTICAL AND APPLICATION BIOCHEMIST. Analyzing amino acids, proteins and other biochemicals by utilizing high-pressure liquid chromatography, gel permeation chromatography and electrophoresis. Applying crystal inhibition, dispersion and chelation principles for application and implementation of proteins in water treatment, detergents, paints, coatings and agriculture. Developing and testing synthetic biochemicals which have an effect on the formation of calcium carbonate. Conduct high-performance chromatography (HPLC), UV/VIS spectrophotometry, atomic adsorption spectrophotometry and specific surface area measurement. Must have master's degree in biology, major field of study in biomineralization. Must have 1 year of job offered experience or 1 year of biochemistry researcher experience. Forty hours per week, 9:00 a.m. to 5:00 p.m. Salary: \$635 per week. Send résumé to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605, Attention: L. Donegan, Reference # V-IL-4264-D,** no calls, an employer-paid ad.

POSTDOCTORAL FELLOWSHIPS IN BIOCHEMISTRY, MOLECULAR AND CELL BIOLOGY

Postdoctoral Fellowships are available in the Laboratory of General and Comparative Biochemistry, National Institute of Mental Health. Applications are invited from individuals of the highest caliber with Ph.D./M.D. degrees. Research interests of the senior staff (G.L. Cantoni, R.R. Aksamit, and P.S. Backlund, Jr.) focus on the role of methylation reactions in the control of biological processes. The laboratory utilizes the tools of biochemistry, molecular and cellular biology, and biochemical genetics in its investigations.

Current research projects are (1) the structure, function, and regulation of enzymes that regulate methylation, (2) the structure, function, and regulation of guanine nucleotide binding proteins involved in signal transduction and other processes, (3) the role of methylation in cellular differentiation and gene expression, and (4) the mechanism of the antidepressive effect of AdoMet.

The salary range is \$25,000 to \$31,000 per year, depending on education and experience. Interested candidates should send a letter stating their interests, their curriculum vitae and list of publications, and the names and addresses of three references to:

**Dr. Giulio Cantoni, Chief, Laboratory of, General,
and Comparative Biochemistry, National Institute
of Mental Health, Building 36, Room 3D-06, 9000
Rockville Pike, Bethesda, MD 20892**

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Lecturer Department of Anatomy (Veterinary)

Teaching: The Department provides courses for students in the Faculties of Medicine, Science, Dentistry and Veterinary Science and for students of Human Movement. The appointee will contribute in a major way to the teaching of anatomy to veterinary students, with some teaching to science and medical students.

Qualifications: Applicants should hold a BVSc and a PhD in a branch of science relevant to the broad field of anatomy.

Research: The appointee must actively participate in research either by establishing a laboratory, or by joining one of the research groups in the Department. Current research in the Department is in 4 main fields: human cardiovascular disease; reproductive biology; neurobiology and movement studies.

Research facilities of the Department include well-equipped laboratories in histology and histochemistry, electron microscopy, image-analysis, cell culture, biochemistry, molecular biology, neurophysiology and human growth and movement studies.

In 1992 some Department funds will be available for the applicant to start a research program. After 1992 the major funding of the appointee's research must be obtained from other sources such as the NH&MRC and ARC.

For further information contact the Head of the Department, Professor Gordon R. Campbell; Telephone (07) 365-2722; Fax (07) 365-1299.

Appointment: This position is tenurable. The successful applicant will be required to take up duty as soon as possible. The salary range for a Lecturer is \$40,000-\$47,150 p.a. (\$48,688 p.a. from July 29th, 1992).

Closing Date: January 29th, 1992. Applications quoting **Reference No. 46491** must be forwarded to: The Director, Personnel Services, The University of Queensland, Qld 4072.

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Pharmaceuticals
Corporation**



Ph.D. - Natural Products Screening (Position #92-55)

Opportunity for an individual to assume the role of Senior Project Manager for Natural Products screening contracts. Candidate should have experience in managing a group doing high through-put screening of extracts of natural products (microbial, plant, marine) for pharmaceutical activities. Qualified individual will have a good background in biochemical pharmacology (enzyme, receptor and cellular assays), data reduction and analysis, and automation technology. Additional skills in microbiology and natural products chemistry are beneficial. Ph.D. required in relevant field. Responsibilities of this position include scientific, personnel and quality management, client reports and making presentations to prospective clients.

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RESEARCH SCIENTIST, PROTEIN CHEMISTRY

Qualified candidates must have a PhD in Biochemistry or a related discipline and a minimum of two years post-doctoral experience. Expertise in methodologies for the purification and characterization of proteins is essential. **Reference Code S-100(CG).**

RESEARCH ASSOCIATE, PROTEIN CHEMISTRY

A Bachelor's degree in Biochemistry or a related discipline and a minimum of two years experience in the purification and characterization of proteins are required. Experience in chromatographic and electrophoretic techniques is essential. Familiarity with HPLC is desirable. **Reference Code S-4417.**

RESEARCH ASSOCIATES, IMMUNOLOGY AND IMMUNOASSAY

Qualified applicants should have a BS or MS in the biological sciences and a minimum of two years experience in cell culture and immunoassay. Experience in monoclonal antibody technology is desired. **Reference Code S-4419.**

RESEARCH ASSOCIATES, MOLECULAR BIOLOGY

Qualified applicants must have BS or MS in Molecular Biology or a related discipline and a minimum of two years extensive molecular biology experience, including gene cloning, PCR, library construction and screening. Experience in mammalian cell culture is required for some positions, but not all. Familiarity with basic protein analysis techniques, including SDS PAGE and Western Blotting, is desirable. **Reference Code S-4418.**

RESEARCH SCIENTIST & ASSOCIATE, BIOPHYSICAL CHEMISTRY

Responsibilities include contributing to on-going programs for the development of physical methodologies for protein characterization, including spectrophotometric methods and analytical ultra-centrifugation. Scientist candidates must have PhD in Chemistry, Biochemistry or a related discipline, and Associates a BS or MS with 0-3 years relevant experience in the characterization of proteins. Candidates should be familiar with general methods for the analysis of proteins. Experience in computerized data analysis spectroscopic methods is highly desirable. **Reference Code S-4416.**

RESEARCH ASSOCIATE, STEM CELL BIOLOGY

Must have a BS or MS in Cell Biology, Biochemistry or a related discipline and a minimum of three years relevant experience in mammalian cell culture, *in vitro* and *in vivo* bioassays, and protein purification and characterization. **Reference Code S-4420.**

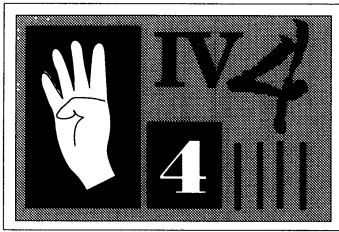
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Unique opportunity for Board-Certified (or eligible) MD with interest in 1-2 year Fellowship in support of clinical research programs. You will expand and clarify ground-breaking research involving use of hematopoietic growth factors in hemato-oncology. Minimum one year background in clinical oncology required. **Reference Code S-RM.**

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Qualified candidates will possess a BS, MS or recent PhD degree and broad virology/cell culture experience. Familiarity with HIV is preferred, but not necessary.

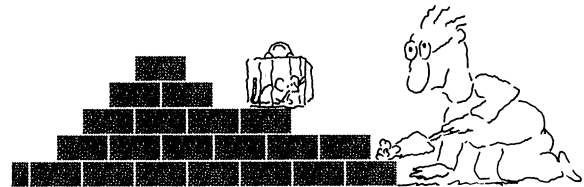
Molecular Biologist

Requirements include a BS, MS or recent PhD degree and extensive experience in molecular cloning. Cell culture experience also desired. This position does not involve work with live HIV.

For immediate consideration, please send your resume to Genentech, Inc., Human Resources Dept. YC/JN, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity.

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Washington, DC 20005 **SCIENCE** The Global Weekly of Research

POSITIONS OPEN

MICROBIOLOGIST (RESEARCH ASSOCIATE), GS-0403-11/12. Dairy Experiment Station, Agricultural Research Service, U.S. Department of Agriculture (USDA), Knoxville, Tennessee. Incumbent will be located at the University of Tennessee and interact with a team of scientists in the bovine mastitis research program examining genotypic and phenotypic characteristics of *Streptococcus uberis* and their relevance to immunity to mastitis in dairy cows. Veterinary microbiology or immunology with a background or interest in bovine mastitis research is desirable. Ph.D. is required. Salary: \$31,116 to \$37,294 per annum based on qualifications and experience. For further information, contact: **Dr. R. H. Miller on 301-344-2330**. For application procedures, contact: **Darlene Fowler, 301-344-3377**. Refer to announcement number **RA-1-043**. Position open until filled. *USDA is an Affirmative Action/Equal Employment Opportunity Employer.*

RESEARCH ASSOCIATE for northeast Ohio medical research facility/hospital to characterize myocardial growth factor "Myotrophin"; raise an antibody against it; and perform molecular biological experiments with it, including cloning. No experience required in above duties but applicants will qualify with 1 year of experience as a research fellow (experience must be in gene expression of various markers of myocardial hypertrophy such as B-myosin heavy chain, α -actin, c-myc, c-fos, connexin 43 using Northern blot analysis and nuclear runoff studies; gene regulation of collagen phenotypes I and III in myocardial hypertrophy by measuring steady-state mRNA levels, rate of transcription, half life of mRNA and in vitro translatability; and raising antibodies against myocardial growth factor, affinity purification of the growth factor, and performing radioimmunoassay, ELISA and Western blot to quantitate the levels of this growth factor) and an M.D. degree in medicine or Ph.D. degree in biology or molecular biology. Monday through Friday, 8:00 a.m. to 5:00 p.m. Salary: \$27,000 per year. *Must have proof of legal authority to work in the United States.* Send résumé in duplicate (no calls) to: **S. Holton, JO#1206027, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

ATMOSPHERIC SCIENTIST PUBLIC POLICY RESEARCH INSTITUTE

World Resources Institute (WRI) in Washington, D.C., invites applications for the position of Senior Scientist, Climate, Energy and Pollution Program, to help bridge the science and policy of climate change. The two main responsibilities of this position are: to design and conduct independent research efforts on the science and policy of climate change risks—specific projects that might be considered include estimating the environmental benefits of reducing climate change risks and the design of valid indicators of climate change; to provide scientific input; analyses and assistance on issues related to global warming and climate change within WRI—these issues might include, for example, the validity of alternative climate change models, the role of feedback mechanisms in influencing climate change estimates, and quantifying the impacts of climate changes on natural systems. The successful candidate should have a Ph.D. in atmospheric chemistry or a related scientific discipline. However, other technical backgrounds that offer substantially similar expertise would be considered. Preference will be given to candidates with backgrounds in the physical sciences. In addition, a strong interest on the part of the candidate in working with public policy researchers, and in integrating strong science with public policy analysis is necessary. Send curriculum vitae and references to: **World Resources Institute, Climate, Energy and Pollution Program, 1709 New York Avenue, N.W., Suite 700, Washington, DC 20006.** *World Resources Institute is an Equal Opportunity Employer.*

BIOMEDICAL RESEARCH AND DEVELOPMENT SCIENTIST

Experienced research and development scientist sought to join team responsible for developing novel immunological diagnostic assay systems. Candidates should have Ph.D. or equivalent training in biochemistry with 1 to 3 years of experience in immunological methodologies and assays. Ventana Medical Systems is an expanding biotechnology company offering excellent opportunities for advancement and career development. Interested candidates should send résumé to: **Director of Personnel, Ventana Medical Systems, Inc., 3865 North Business Center Drive, Tucson, AZ 85705.**

POSITIONS OPEN

ANALYST

The Office of Technology Assessment, a science and technology support agency in the U.S. Congress, is seeking an analyst for a new study on risk assessment of chemical carcinogens. We are looking for an individual with a strong background in biochemistry toxicology, or a related discipline, an interest in the research base underlying federal health and environmental regulations, the ability to work as part of a team, and excellent writing skills. This position is available immediately. Salary commensurate with experience.

Please send cover letter, curriculum vitae, writing sample, and salary history to:

**Margaret McLaughlin
Biological Applications
Office of Technology Assessment
U.S. Congress
Washington, DC 20510-8025
No phone calls, please.
Equal Opportunity Employer.**

EM/IMAGING SPECIALIST

High-level technical position in the Colorado State University (CSU) Electron Microscopy (EM) Center for electron and optical microscopy; TEM, SEM, EDS, confocal microscopy, and freeze-fracture. Salary: \$30,000 to \$40,000. Send curriculum vitae and three references with telephone numbers to: **EM Search Committee, Department of Anatomy and Neurobiology, Colorado State University, Ft. Collins, CO 80523.** Early application deadline: 15 February 1992. *CSU is a Equal Opportunity/Affirmative Action Employer. E.O. Office: 21 Spruce Hall.*

INFECTIOUS DISEASE IMMUNODIAGNOSTICS

bioMerieux Vitek, Inc., a major manufacturer of products for automated infectious disease diagnostics, has an opening in its R&D Department for an experienced scientist in the development of nonisotopic immunoassays.

MOLECULAR BIOLOGIST/ NUCLEIC ACID PROBES

Seeking R&D scientist with postdoctoral and industrial experience in the development of nucleic acid probe diagnostics. Candidate will work with R&D groups in the United States and abroad. Hands-on experience in amplification methods and extensive knowledge of the various enzymes used is a must. Strong background in clinical microbiology is preferred.

We offer a comprehensive benefits package and a nonsmoking environment. Interested candidates please send your résumé to:

**bioMerieux Vitek, Inc.
1022 Hingham Street
Rockland, MA 02370
Human Resource Department
An Equal Opportunity Employer, M/F/H/V.**

LAKE MANAGEMENT EXTENSION SPECIALIST to provide educational and organizational assistance to lakeshore communities. Ph.D. preferred, M.S. or significant experience required, in adult education, environmental sciences, engineering, law, limnology, natural resources, planning, or sociology. Salary: \$32,000 minimum. Screening begins 20 January 1992. Send cover letter, résumé, transcripts, and names of three references and two most recent supervisors to: **Lowell Klessig, CNR, University of Wisconsin, Stevens Point, WI 54481.** Telephone: 715-346-4266; FAX: 715-346-3624.

NIH training grant opening for **PROTEIN CHEMIST/NUCLEIC ACID RESEARCHER**. Metabolic regulation laboratory (University of California, Berkeley, and University of California San Francisco). Work on new measurement techniques for apolipoprotein synthesis, gene transcription, lipid biosynthesis. Experience with mass spectrometry helpful. *Limited to U.S. citizen or permanent resident.* Apply to: **Marc Hellerstein, M.D., Ph.D., Department of Nutritional Sciences, Morgan Hall, University of California, Berkeley, CA 94720.** Telephone: 510-642-0646. Start date negotiable. *An Affirmative Action/Equal Opportunity Employer.*

More than 150,000 people paid to see your ad in **SCIENCE**. Classified Advertising Department telephone: 202-326-655. FAX: 202-682-0816.

POSITIONS OPEN

GENETICIST

A Salt Lake City genetic engineering firm is recruiting for a geneticist to develop genetic and physical maps in domestic species. Applicant will map economic trait loci, estimate implement generated information within breeding schemes, and supervise approximately ten scientists. Must have Ph.D. in veterinary medicine or genetics. Experience required in animal breeding programs and schemes for domestic animals, and in quantitative and molecular genetics. Forty hours per week, Monday through Friday; from \$42,000 to \$50,000 per year. Send résumé to:

**Utah Job Service
P.O. Box 11750
Salt Lake City, UT 84147-0750
Job Order #2816191**

IN VIVO MR SPECTROSCOPY

The Department of Radiology of the University of Iowa invites applications for positions in in vivo MR spectroscopy. Candidates should have experience in the biochemistry and/or physics and instrumentation of MR. The University of Iowa Hospitals and Clinics currently has one clinical 1.5T MR system with spectroscopic capabilities and is in the process of acquiring a second unit. The successful candidates will participate in a research program aimed towards eventual clinical applications. Requires the academic knowledge of a field of discipline, generally associated with a master's degree in one of the physical sciences or an equivalent combination of education and experience. A Ph.D. in biochemistry, chemistry, physics with special emphasis in MR spectroscopy is desirable. *Women and members of minority groups are encouraged to apply.* Contact: **William T. C. Yuh, M.D., Department of Radiology, University of Iowa, Iowa City, IA 52242.** *The University of Iowa is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH SCIENTIST. To set up laboratory and co-direct research on regulation and function of mitochondrial enzymes during heart muscle development and cardiomyopathies. Must have Ph.D. in molecular biology/biochemistry, minimum of 5 years of postdoctoral experience, publications and history of successful grants applications. Background on skeletal/heart muscle research preferred. Salary is negotiable. Send curriculum vitae, bibliography and three reference letters to:

**Jose Marin, M.D.
Pediatric Cardiology Group of New Jersey
2130 Millburn Avenue
Maplewood, NJ 07040**

SENIOR SYSTEMS PROGRAMMER/ ANALYST

Senior systems programmer/analyst needed to provide technical leadership in developing, modifying and maintaining large-scale computer systems for high energy physics data analysis. Assist in systems administration and provide systems support for a computer network facility composed of 150 UNIX and VAX/VMS work stations and server nodes. Adapt and support CERN laboratories specialized system software components and methods for data analysis. Assist users with software and/or hardware problems.

Requirements: Advanced degree in experimental high energy physics or equivalent and 5 years of experience in programming working with UNIX, VMS, FORTRAN and C. Intimate knowledge of high energy physics computing and CERN software systems.

Cornell is an Equal Opportunity/Affirmative Action Employer.

Application deadline: 30 December 1991. Send résumé and cover letter to: **Ray Helmke, Wilson Synchrotron Laboratory, Cornell University, Ithaca, NY 14853.**

STAFF SCIENTIST (PHYSICIST). Compound semiconductor manufacturing operation. Will work with As, Cd, Ga, Te, CdHgTe and GaAs. Must have bachelor of science in physics or materials science and 5 years of experience with IR and Hi-Purity metals. Minimum of 1 year of specialized experience required with ultra-high purity technology, metal casting, wafer annealing, Nd: YAG laser cutting and II-VI compound semiconductors. Employment location is Spokane, Washington. Salary is \$43,500 per year; 40 hours per week. Send résumé to: **Employment Security Department, ES Division, Job 295472, Olympia, WA 98504** by 3 February 1992.

RESEARCH ASSOCIATES POSTDOCTORAL

The Cedars-Sinai Research Institute is recruiting two Postdoctoral Fellows/Research Associates to join the neurogenetics laboratory. Cedars-Sinai Medical Center is a major affiliate of the UCLA School of Medicine. The research institute has established programs in molecular and cellular biology and human genetics.

Successful candidates will be involved in the molecular-genetic study of neurodegenerative disorders and the molecular analysis of familial CNS tumors. Applicants must possess a PhD or MD degree and a strong background in molecular biology and genetics. The positions are funded for a minimum of two years. The salary is \$25 to 30,000 per annum depending on experience.

Please send curriculum vitae with names/addresses of 3 references to: Dr. Stefan M. Pulst, CEDARS-SINAI MEDICAL CENTER, Becker Bldg., 8700 Beverly Blvd., Los Angeles, CA 90048. Telephone: (310) 855-5166. Fax: (310) 967-0119. (AA/EOE)

 CEDARS-SINAI MEDICAL CENTER

Assistant Professor of Physiology

The Department of Physiology, College of Veterinary Medicine at Cornell University is seeking applications for the position of Assistant Professor. The successful candidate is expected to develop a research program in reproductive physiology with relevance to domestic animals, especially the molecular biology of the neuroendocrine events that control various aspects of reproduction. The appointee will participate in teaching physiology to veterinary students and is expected to participate in graduate education through the Graduate Field of Physiology. Applicants should have a Ph.D. in an appropriate discipline with post doctoral experience, or a DVM or MD Degree with post doctoral training in reproductive physiology.

Extensive facilities exist for housing laboratory and domestic animals. Excellent opportunities exist for collaboration within the College and the Sections of the Division of Biological Sciences.

Send letter of interest, curriculum vitae and the names of three references to Dr. D. Robertshaw, Department of Physiology, 725 VRT, Cornell University, Ithaca, NY 14853-6401, USA. Closing date February 15, 1992, or until filled.

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NYU
Medical
Center

Neuroscience Training Program/Drug Abuse

Candidates who desire postdoctoral training in neuroscience research on drugs of abuse are invited to apply to the New York University Medical Center Training Program, sponsored by the National Institute on Drug Abuse, Dr. Eric J. Simon, director, Dr. Kenneth D. Carr, codirector. Trainees will be able to choose among 9 Faculty mentors, ranging in expertise from Molecular Biology to Behavior. Applicants should have completed their Ph.D., M.D. or D.O. degree within the past 3 years and must be citizens or permanent residents of the United States. Training can begin any time between February and July, 1992. New York University is an equal opportunity employer and welcomes applications from women and minority candidates.

Send C.V. to Eric J. Simon, M.D., Department of Psychiatry, NYU Medical Center, 550 First Ave., New York, NY 10016.

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Molecular and Cell Biologists

The School of Medicine of the University of Pennsylvania seeks to recruit three to five outstanding investigators (ranks open) to occupy laboratories in a superb, new biomedical research building. Research programs in this building focus on molecular approaches to understanding the regulation of normal cellular processes and to defining the basis of human diseases. Investigators joining this group will be able to draw on the rich and diverse environment within the University of Pennsylvania community which includes the School of Medicine, the School of Arts and Sciences, the School of Veterinary Medicine, the School of Dental Medicine, as well as the nearby Wistar Institute. Exceptional start-up and recurring support is available for these positions. Outstanding candidates in any area will be considered, but investigators utilizing molecular approaches to study cellular control processes will receive special attention to complement existing programs within this group. Appointments are available in clinical and basic science departments for M.D.'s, M.D./Ph.D.'s, and Ph.D.'s. Interested applicants should send a C.V., with three letters of recommendation to:

Edward W. Holmes, M.D.
Chairman, Search Committee
University of Pennsylvania Medical Center
100 Centrex
Philadelphia, PA 19104-4283

The University of Pennsylvania is an
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YOUNG INVESTIGATOR PROGRAMS WITH RUSSIA AND POLAND ON BIODIVERSITY AND ENERGY

In 1992 the National Academy of Sciences will jointly sponsor two three-week summer programs, one on biodiversity with experts from the Russian republic and one on energy management with Polish experts. Each program will involve an interdisciplinary team of ten American specialists and ten Russian or Polish specialists, all of whom have earned the Ph.D degree or achieved equivalent accomplishments since January 1, 1984.

The first program will focus on anthropogenic impacts on biodiversity. The June 1992 summer session will consist of three weeks of joint research and consultations at two sites in California. The program will investigate how federal, state, and local authorities are cooperatively working with scientific and public interest groups. In this regard, many factors bear on the preservation of biodiversity, and a wide range of topics in the natural and social sciences are relevant to the general theme. The 1993 session will have a similar orientation. It will be held at a Russian site with problems analogous to those of California: encroachment of urbanization, pollution, and industry on flora and fauna.

The program on energy management will examine integrated approaches to energy problems in Poland and the United States. The program will address: energy planning, data assessment, and analytical methods; energy-efficient strategies, including specific goals and objectives; the roles of various levels of government, the private sector, and non-governmental organizations; energy-efficient technologies; environmental effects of energy practices; and education and training. The first session will be held in Poland in August 1992, and the second in the United States during the summer of 1993.

To apply to either of the two programs please submit five copies of each of the following to the Office of Soviet and East European Affairs, National Research Council, 2101 Constitution Ave, N.W., Washington, D.C. 20418, by February 7, 1992: curriculum vitae; list of publications; description of the relevance of participation in the program to present activities and long-term plans, two letters of recommendation, and a statement of intent to participate in the full three weeks of both the 1992 and 1993 programs. Notification date: March 9, 1992.

Biodiversity Program: Attn: Kathleen K. Trivers, 202/334-3654.
Energy Program: Attn: Stephen G. Deets, 202/334-2658.

POSITIONS OPEN

RESEARCH SCIENTIST. Position available immediately to join group studying autoimmunity-associated ribonucleoprotein complexes. Research projects include: molecular definition of polypeptide antigens; functional study of RNA-protein interactions; characterization of macromolecular properties. Molecular biology expertise and postdoctoral experience required. Appointment offers opportunity to develop own research program. Send curriculum vitae and three references to: **Dr. S. O. Hoch, The Agouron Institute, 505 Coast Boulevard South, La Jolla, CA 92037.**

SENIOR CHEMIST responsible for utilizing: corrosion and corrosion protection theories and methods; kinetics of electrode reactions responsible for metal corrosion, including iron and copper dissolutions, oxygen reduction and hydrogen evolution; passive film formation, structure and properties and mechanisms of corrosion inhibition and inhibitors to conduct research and development of projects relating to corrosion and corrosion protection in water treatment processes; utilize modern surface analytical techniques and electrochemical techniques including the utilization of automatic rotating-analyzer ellipsometers, x-ray photoelectron spectroscopy, FTIR, and GC-MS to study relationships between metal/solution interfacial structure and corrosion reaction kinetics for development of effective corrosion inhibitors including passive film and organic inhibitor adsorbed layer on iron-based metals and electrode reaction mechanism and their interrelationships; provide correct interpretation and basic theoretical understanding of various corrosion phenomena encountered in water treatments for effective corrosion prevention; apply mathematical modeling, chemistry and chemical engineering skills and knowledge in the design, evaluation and optimization of electrode materials, structures and operation conditions for electrosynthesis of chemicals for water treatment applications. Applicants must possess Ph.D. in physical chemistry plus 3 years of experience in the job offered or 3 years of experience as a research assistant. Experience must have included research in corrosion science including corrosion and corrosion protection theories and methods; kinetics of electrode reactions responsible for metal corrosion, including iron and copper dissolutions, oxygen reduction and hydrogen evolution; passive film formation, structure and properties, and mechanisms of corrosion inhibition and inhibitors. Must have utilized automatic rotating-analyzer ellipsometers, x-ray photoelectron spectroscopy, FTIR, radiotracers, GC-MS, C252-PDMS to investigate metal/solution interfacial structure including passive film and organic inhibitor adsorbed layer on iron and electrode reaction mechanisms and their interrelationships. Academic program or experience must have included the conduct of mathematical modeling of electrochemical systems and determination of critical parameters including effective electrode conductivity, mass transfer coefficient and current and potential distribution for effective operation of industrial electrochemical reactors for application in water treatment processes. Forty hours per week, 9 a.m. to 5 p.m. Salary: \$46,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605. Attention: D. Rule, Ref. #V-IL-4408-R.** Two copies of your résumé are required. No calls. *An employer-paid ad.*

STAFF PROGRAMMER: Designs, implements and maintains advanced prolog system with interfaces to DBMS, graphic, ILC, CAD/CAM and simulation. Conducts research and development of a state-of-the-art prolog interpreter and compiler for various platforms. Develops integrated programming tools to establish a comprehensive development environment for these platforms. Requirements: Ph.D. in computer science and demonstrated background in the following: prior experimentation in theory and practice of logic programming, prolog implementation, WAM optimization, compiler construction, programming language semantics, software engineering; developing prolog knowledge-based systems and tools on IBM mainframe, especially CAD/CAM and simulation. Theory and practice of data and knowledge-based management systems; computer architecture, especially S/370 and 80386. Above demonstrated by Ph.D. dissertation, research and publications. Forty hours per week; salary: \$55,000 per year. Job and interview site: San Jose, California. Send this ad and your résumé to: **Job #TC11409, P.O. Box 9560, Sacramento, CA 95823-0560** not later than 18 January 1992. *Equal Opportunity Employer.*

POSITIONS OPEN

MARKET DEVELOPMENT AGRONOMIST to provide technical expertise to canola growers, extension agents and researchers in the United States; evaluate regions for canola production potential and develop marketing strategies for areas within the United States; disseminate production information through grower meetings, publications and personal contact; liaison with U.S. agri-industry. Position involves travel within the United States approximately 120 days per year. B.S. in plant science plus 5 years of experience as a Canola Agronomist. Salary: \$41,164 per year. Forty hours per week. Mail résumés to: **Mike Daniel, Job Service Program and Technical Support, Tennessee Department of Employment Security, Nashville, TN 37245-1200.** Refer to **Job Order No. TN1235940**; Location—Clarksville, Tennessee.

RESEARCH SPECIALIST. Full-time research specialist responsible for research involving isolation and characterization of human genomic clones coding for lens intrinsic membrane protein MP19 and mapping to its human chromosome and expression of bovine lens intrinsic membrane protein MP19 in baculovirus system using molecular biology, protein biochemistry and cell culture methodology. Must have master's degree in one of the life sciences and must have experience with immunostaining, cytotoxic assay, molecular biology methodologies and membrane protein isolation and amino acid sequencing. Salary: \$21,380 per year. Applicants apply in person or by résumé to: **Georgia Department of Labor, Job Order # G#5518235, 1275 Clarendon Avenue, Avondale Estates, GA 30002, or to the nearest Georgia Job Service Center.**

SENIOR RESEARCH SCIENTIST to direct team of scientists in the design and synthesis of selected compounds as immunogen for the production of catalytic antibodies for use as therapeutics for infectious diseases, cancer and heart disease. Research includes devising and synthesizing, with the aid of asymmetric and solid-phase chemistries, nucleotides, nucleosides, organophosphorus, organofluorine, carbohydrates, peptides and macrocycles, and attaching small molecules to antibodies by developing appropriate linker groups. Research also includes aqueous chromatographic techniques (e.g., gel filtration, ion exchange and preparative reverse phase), high field NMR, UV, IR and HPLC. Ph.D. in organic chemistry plus 3 years of experience as research scientist/organic chemistry required. Previous experience must include 3 years of hands-on experience incorporating organophosphorus and organofluorine groups into peptides, synthesis of carbohydrates derivatives, nucleosides, nucleotides macrocycles, and development of linker groups to attach immunogen to proteins, aqueous chromatographic techniques (gel filtration, ion exchange and preparative reverse phase), high field NMR, UV, IR and HPLC. Forty hours per week, Monday to Friday, 8:30 a.m. to 5:30 p.m.; \$65,000 per year. Send résumés to: **IGEN, Inc., Human Resources, 1530 East Jefferson Street, Rockville, MD 20852.** *Equal Opportunity Employer.*

COURSES AND TRAINING

ADVANCES IN MARICULTURE: TECHNIQUES AND FUTURE DIRECTIONS FOR PROVIDING MARINE ORGANISMS FOR BIOLOGICAL RESEARCH; 17 to 29 May 1992. For 20 scientists, advanced technicians or students interested in any aspect of the biology of marine organisms requiring culture techniques. This course combines intensive laboratory training with reviews of a wide range of basic principles relevant to the culture and maintenance of marine organisms, including seawater system design, water quality control, plankton culture, evaluation of commercial diets, and disease prevention and treatment. Developments in molecular biology, genetics, biotechnology and computerization applicable to mariculture will be explored, as will issues regarding animal welfare and alternative models of experimentation. Emphasis will be given to marine invertebrates and fishes used in basic biological and biomedical research. Visits are planned to research laboratories throughout Woods Hole as well as to local clam, scallop, and lobster mariculture facilities. Director: **Roger T. Hanlon, Marine Biomedical Institute, Galveston, Texas.** Tuition—\$1200 includes room and board. Application deadline: 20 March 1992. For further information and application, contact: **Florence Dwane, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543.** Telephone: 508-548-3705, ext. 216.

POSITIONS OPEN

RESEARCH SCIENTIST

The Wadsworth Center for Laboratories and Research is seeking highly qualified scientists to (1) participate in existing program in trace element studies in humans and environment and (2) develop his/her own independent research program. The position could include a joint appointment with the Graduate School of Public Health which is located at the Wadsworth Center. The laboratory is fully equipped with state-of-the-art instrumentation and is staffed with personnel active in research on long-range transport of pollutants, acid rain, atmospheric chemistry of sulfur dioxide, radioactive and nonradioactive tracers, cosmogenic isotopes, trace elements in biological systems and indoor radon. A Ph.D. degree with 0 to 5 years of experience is desirable. Salary commensurate with qualifications. Position funded through Health Research, Inc., with excellent fringe benefits. Send résumé to: **Health Research, Inc. (Dr. L. Hussain), P.O. Box 2077, Albany, NY 12220** by 31 January 1992. *Affirmative Action/Equal Opportunity Employer.*

ANNOUNCEMENTS

PREDOCTORAL TRAINING POSITIONS

TRAINING IN IMMUNOLOGY/MOLECULAR BIOLOGY as they relate to **OPHTHALMOLOGY.** Positions available fall 1992 as part of NIH-funded training grant. Faculty interests include regulation of growth and development, wound healing, immunobiology, inflammation, blood-retinal barrier, and glaucoma. Students study jointly with a Ph.D.-awarding basic science department and the ophthalmology department. Send inquiries to: **James T. Rosenbaum, Casey Eye Institute, Oregon Health Sciences University, 3375 S.W. Terwilliger Boulevard, Portland, OR 97201-4197.**

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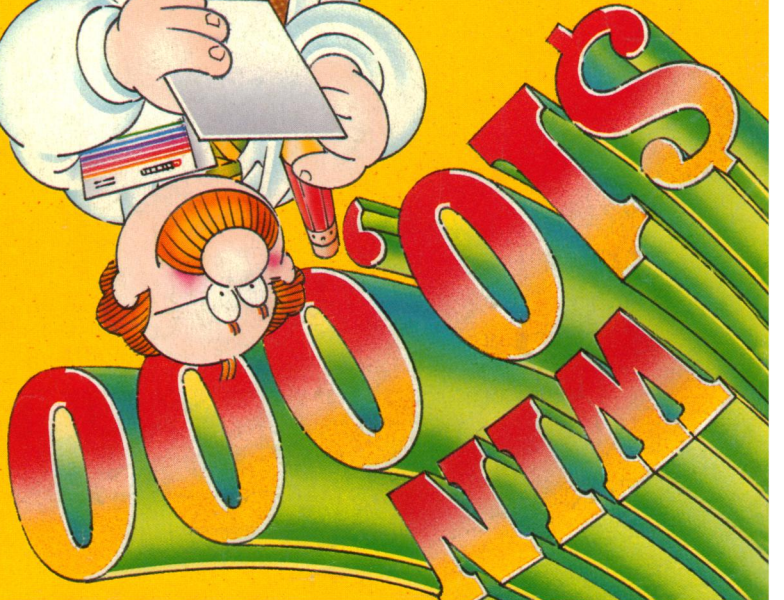
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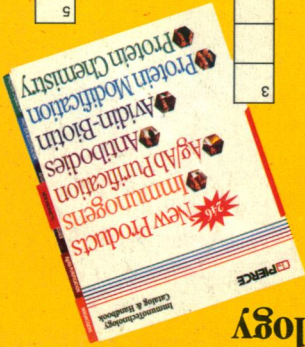
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NOTE: All hyphens and numbers have been eliminated

ACROSS

- 2. Competitive ligand for elution of biotinylated proteins
- 8. A traditionally used precipitating HRP substrate
- 10. Functional group which will react with carbonyl groups for stable hydrazide linkages
- 11. A T cell mitogen (abbreviation)
- 13. May be used for both antibody screening and solotyping
- 16. Reacts with thionine moieties on RNA
- 17. Inhibits calcium-dependent cysteine proteases in tissues
- 19. Can be used for selective removal of immunoglobulins from fetal calf serum
- 20. The most common neutral lipophilic fluorescent probe
- 22. Used to produce human Fc γ fragments
- 23. The longest wavelength fluorophore currently available for antibody labeling
- 24. Activators which may be related to cancer metastasis

DOWN

- 1. Will bind to trypsin
- 3. Protein which has considerable structural homology to C1q
- 4. Used to label antibodies at aldehyde sites without inhibition of the antigenic site
- 5. Has been used in a colorimetric assay for cellular transglutaminase
- 6. Found only in the basement membrane
- 7. Some of Pierce's polyclonals have been against immunoglobulins from other species
- 9. Catalyzes the β -ester bond hydrolysis of lipids
- 12. A new, cleavable, sulfhydryl-reactive cross-linker potential related to cell motility in viable sperm cells
- 15. A glycoprotein composed of a 150 kD alpha subunit and a 115 kD beta subunit
- 17. Hammersten grade, 1% in PBS
- 18. Can be used as both a blocking buffer and a conjugate carrier
- 21. Proposed as the receptor binding region of laminin

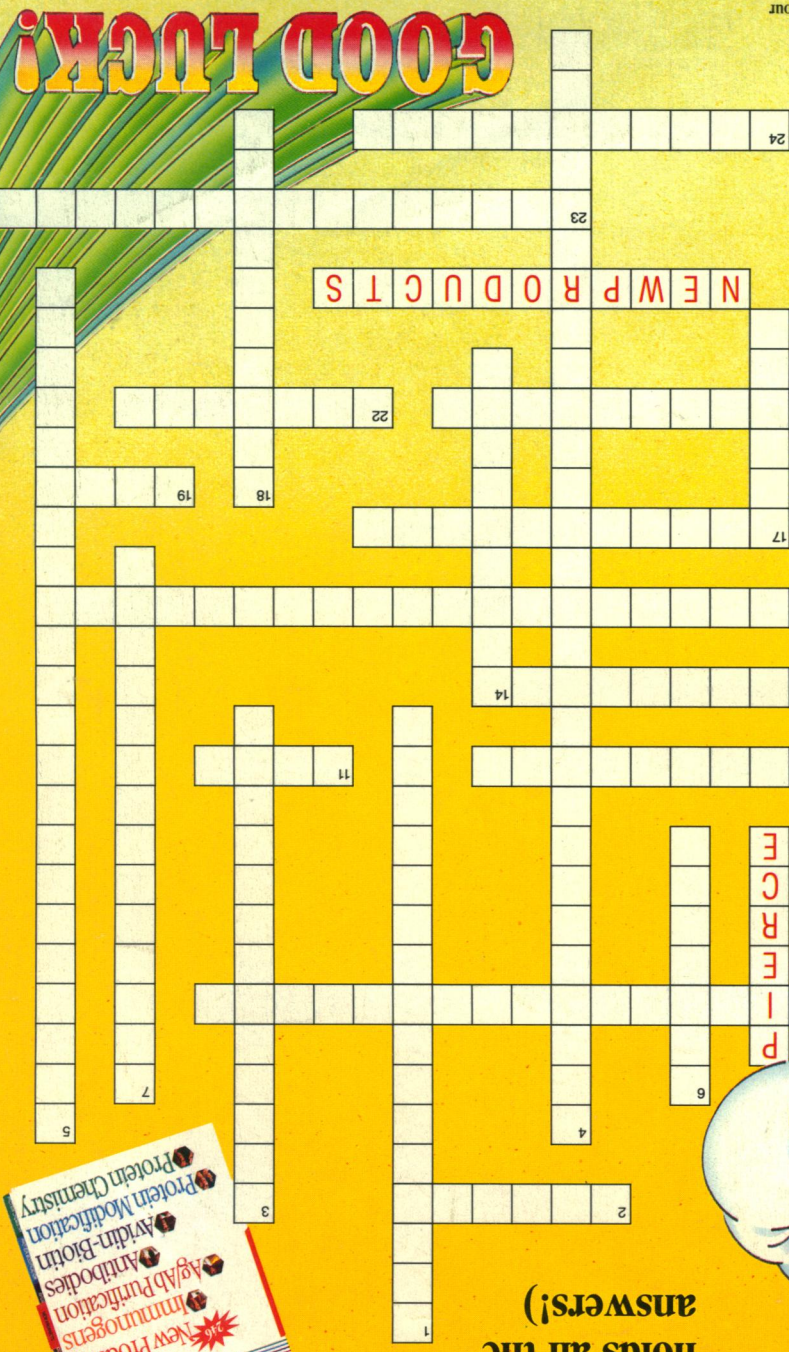
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- 2. Complete the information at right. All information must be included.
- 3. Tear out this page, place in an envelope and mail to: Pierce Puzzle, P.O. Box 117, Rockford, IL 61105.
- 4. If more than one entrant solves the puzzle, the winner will be selected in a random drawing on March 31, 1992. Winner will be notified no later than April 15, 1992.
- 5. All entrants must be researchers at least 21 years of age and employed by an industrial, academic, clinical or governmental research facility. Employees of Pierce Chemical, Pierce Europe, Persorp, Pierce Agents/Distributors or family members of aforementioned are ineligible.
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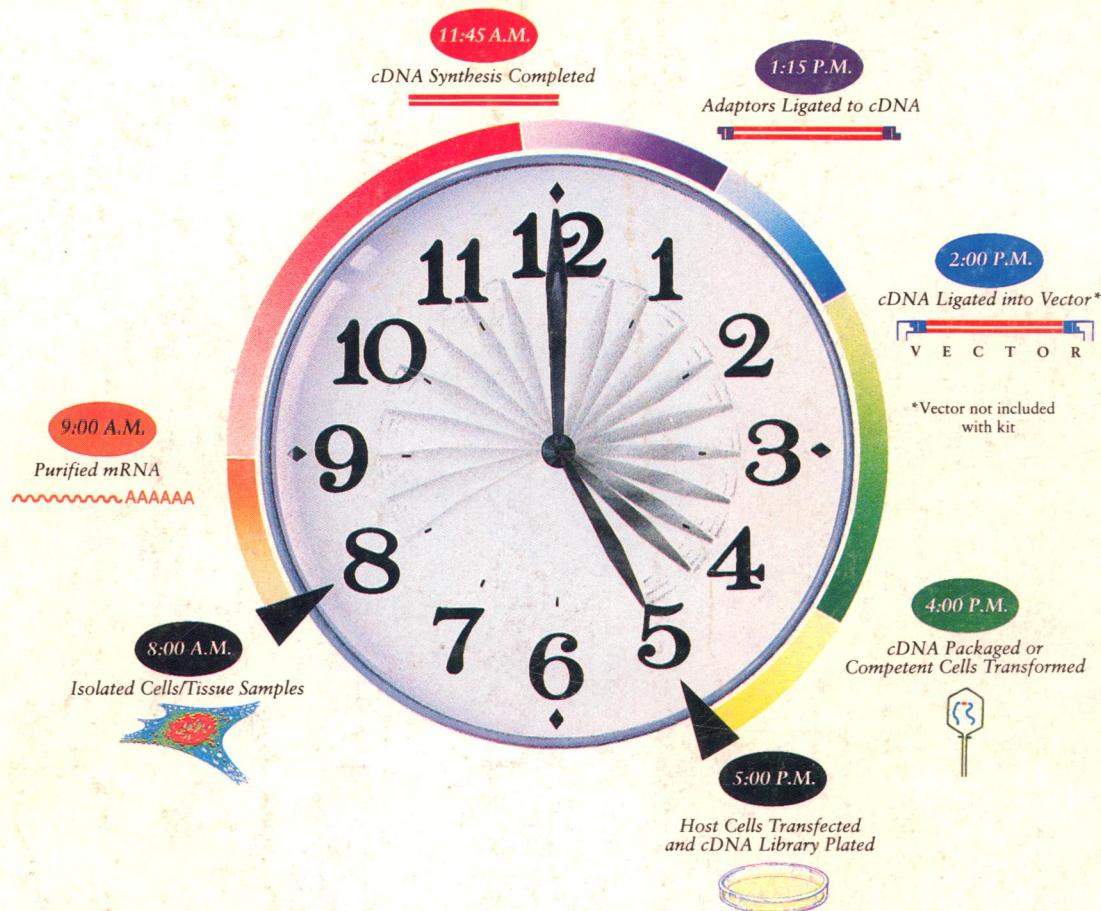
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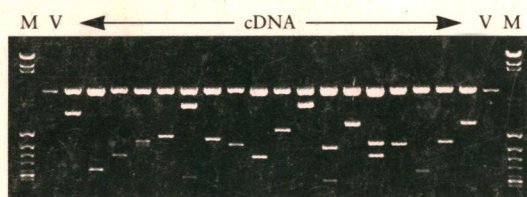


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