

DNA Sequencing Software

DNAscan is an automated DNA sequencing software program and co-processor board compatible with the Molecular Dynamics Computing Densitometer, PhosphorImager, and ImageQuant Workstation. DNAscan automatically calls full-sized, 35 by 43 cm DNA sequencing gels acquired by any Molecular Dynamics scanner and generates the base sequence in seconds with little operator assistance. An automated lane finder follows the lane centers of each gel, even when the lanes are compromised by "curving" or "smiling." Once the lanes have been identified, the individual bands in each lane are automatically located and the sequence is generated. Molecular Dynamics. **Circle 87.**

High-Resolution Video Microscopy

The 1600X Plan Trinocular High Resolution System for video microscopy features a 480 horizontal line camera and monitor. The



system resolves objects to 0.7 μm . It includes a trinocular plan microscope, Sony high-resolution camera, video relay lens, $\times 10$ periplan eyepiece, Sony 13-inch Trinitron high-resolution monitor, and connector cable. Edmund Scientific Co. **Circle 88.**

Gel Product

MetaPhor agarose forms strong gels that finely resolve polymerase chain reaction products and DNA fragments similarly to 5.5 to 8.0% polyacrylamide gels, detecting a size difference of 2% in

the range of 200 to 800 base pairs. This agarose, compatible with most electrophoretic and blotting equipment, combines the convenience of agarose with the resolution power of polyacrylamide, according to the manufacturer. FMC BioProducts. **Circle 89.**

Monoclonal Antibodies

A line of monoclonal antibodies (MAbs) includes several new specificities, including C-kit, CD26 (DPP IV), Forssman antigen, interleukin-2 receptor β chain (p75), Mac-3, and Sca-1. These antibodies are supplied both purified and conjugated for use in flow cytometry. Pharmingen. **Circle 90.**

New MAbs are reactive with free light chains or cell populations bearing kappa or lambda light chains (human). They are offered unlabeled or labeled with horseradish peroxidase, alkaline phosphatase, or fluorescein isothiocyanate and are for use in immunohistochemical and flow cytometry applications. Kirkegaard & Perry Labs. **Circle 91.**

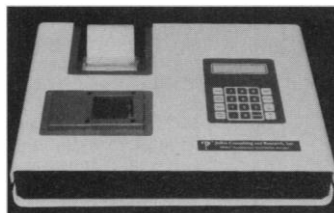
Chemist's Personal Software

Version 1.5 of the Chemist's Personal Software Series is an integrated system consisting of ChemText, a word processor combined with a chemical drawing editor; ChemBase, a chemical database manager for personal databases stored on a personal computer; and ChemTalk Plus, communications software providing terminal emulation, file transfer, and on-line database access. The program runs on the IBM PC, AT, XT, and PS/2 and compatibles. Molecular Design Ltd. **Circle 92.**

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.

Fluorescence Polarization Analyzer

The FPM-1 is a high-performance instrument dedicated to the measurement of fluorescence polarization and fluorescence intensity, techniques that have been used in the detection and measurement of antigens, antibodies, DNA,



RNA, and enzymes and in studies of living cells and their membranes. The system is rapid (about 5 s per measurement) and precise (<0.001 polarization units standard deviation). It is accurate at 10^{-11} M fluorescein in the polarization mode and down to 10^{-12} M in the intensity mode. Output is available by hard copy or via an RS 232 port to an external computer. Jolley Consulting and Research. **Circle 93.**

Quantification of Amplified Nucleic Acids

DIANA Basic Reagents are designed for the rapid colorimetric detection and quantification of an initial amount of DNA/RNA template. The target nucleic acids, amplified by a nested polymerase chain reaction, can be of microbial origin or represent a genetic disorder or an allelic variation. DIANA (detection of immobilized amplified nucleic acids) is based on the co-amplification of target DNA with a specific amount of a cloned DNA fragment, in which a *lac*-operator sequence has been introduced by in vitro mutagenesis. Amplified biotinylated DNA is immobilized onto Dynabeads M-280

Streptavidin, and the ratio of target DNA to cloned mutated DNA is determined using a fusion protein that selectively binds the *lac*-operator sequence of the cloned DNA fragment. Addition of a chromogenic substrate allows for the colorimetric quantification of the target DNA. Dynal Inc. **Circle 94.**

Literature

Alchemist III: The third and newest edition of the famous Fisher Innovative Products Catalog features innovative developments in "gadgets," including timers, stopwatches, calculators, computerized notebooks, controllers, and thermometers. Fisher Scientific. **Circle 95.**

Spherical Silicas for Preparative HPLC provides specifications for an extensive line. Shandon Scientific. **Circle 96.**

Class You'd Expect from the World Leader is a catalog that features Finnpiettes, Finntips, Combiplates, and Microstrips. Lab-systems. **Circle 97.**

Basic Biology of Bone and Cartilage is a poster that illustrates bone remodeling and the cells of bones. Basic cartilage biology and molecules and the functions of the four primary molecules in bone metabolism are defined. Metra Biosystems. **Circle 98.**

Determination of Inorganic Anions Using Capillary Zone Electrophoresis is an application note about the use of capillary electrophoresis for the determination of anions such as bromide, chloride, sulfate, nitrite, and nitrate. Dionex. **Circle 99.**

Exttech Instruments: 1993 Catalog includes specifications and descriptions of portable and benchtop instruments for testing and measurement, plant maintenance, water quality, and monitoring and control. Exttech Instruments Corp. **Circle 100.**

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POSITIONS OPEN

ASSISTANT PROFESSOR Department of Zoology—UBC

Applications are invited for a tenure-track position at the Assistant Professor level in the Department of Zoology, University of British Columbia. Appointment may be considered at a higher rank for a senior woman with exceptional qualifications. Salary will be commensurate with education and experience.

The Department of Zoology currently comprises 36 faculty members, approximately 35 postdoctoral fellows and research associates, and 140 graduate students. Preference will be given to candidates with at least 2 years of postdoctoral experience and with demonstrated excellence in research that complements the present strengths in the department. We require an animal population geneticist with strong theoretical skills. Experience with molecular biology approaches to this discipline will be considered an additional asset. The appointee will be expected to develop a strong research program, and teach in appropriate undergraduate courses, including biostatistics. Starting date will be July 1, 1994. Appointment is subject to final budgetary approval.

Curriculum vitae, 3 letters of reference, and a brief outline of research interests should be submitted to: **Dr. J. E. Phillips, Head, Department of Zoology, University of British Columbia, #2354-6270 University Boulevard, Vancouver, B.C. CANADA V6T 1Z4. FAX: (604) 822-2416.** Closing date for application is June 1, 1993.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities.

UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER SCHOOL OF PHARMACY

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

MEDICINAL CHEMIST AND DIRECTOR

Center for Drug Design and Development

The University of Toledo seeks a highly qualified senior scientist for a tenured faculty position at either the **ASSOCIATE** or **FULL PROFESSOR** level in the Department of Medicinal and Biological Chemistry. The person selected for the position will conduct a nationally visible and extramurally funded research program with an emphasis on chemical approaches to drug design, provide leadership to the Center for Drug Design and Development and teach undergraduate and graduate Pharmacy students. The essential qualifications for the individual are a Ph.D. or equivalent terminal degree in chemistry, medicinal chemistry or related area, a working knowledge of the pharmaceutical industry and an interest in and corresponding ability for effective teaching. Applicants should submit a letter of interest, brief summary of research interests, current résumé and names, addresses and telephone numbers of four references to: **Dr. Wayne Hoss, Chair, Medicinal Chemistry Search Committee, College of Pharmacy, The University of Toledo, Toledo, OH 43606.** Review of applications will begin on March 15, 1993, and continue until the position is filled. *The University of Toledo is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CELL BIOLOGIST/MOLECULAR BIOLOGIST

The Institute of Chemical Toxicology (ICT), Wayne State University, is seeking to fill a tenure-track faculty position at the **ASSOCIATE/FULL PROFESSOR** level in the area of cell biology and/or eukaryotic molecular biology. Preference will be given to applicants interested in factors affecting cultured cell function, phenotypic characteristics, differentiation, regulation of gene expression, and also to those with experience in oncogenes, transcription factors, growth factors, retroviruses, and in the molecular/cellular effects of toxic substances and carcinogens (e.g., DNA repair). The ICT has 8 faculty actively engaged in research on regulation of gene expression, oncogene and tumor suppressor gene function, immunomodulation, immortalization and differentiated epithelial cell function, kinase-mediated signal transduction, cellular toxicity of metals and transgenic animals. The ICT has established a transgenic animal facility. The Institute of Chemical Toxicology offers a research-intensive environment and faculty are expected to develop independent, extramurally funded research programs. Excellent new laboratories, equipment, support facilities, and generous start-up funds are available. Candidates should have a Ph.D., M.D., or D.V.M. degree and a strong track record in research. Send curriculum vitae and a brief description of research interests to:

Dr. Raymond F. Novak
Institute of Chemical Toxicology
Wayne State University
2727 Second Avenue, Room 4000
Detroit, MI 48201

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ASSISTANT PROFESSOR—GROSS ANATOMY

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

ASSISTANT PROFESSOR—Tenure-track—Neuroscientist: The Department of Biology of Cleveland State University (CSU) has open a tenure-track position at the rank of assistant professor starting in the fall of 1993. The position requires the teaching of neurophysiology and neuroanatomy to biology majors and physical and occupational therapy majors. Other teaching will be required in introductory biology courses and in the area of the individual's expertise. The field of research specialization is open. The successful candidate is expected to establish an independent research program and to participate in the undergraduate (B.S.) and graduate (M.S., Ph.D.) programs of the department. Applicants must have a Ph.D.; postdoctoral and teaching experience are desirable. Complete curriculum vitae, a brief statement of career objectives and three supporting letters should be sent to: **Peter C. Baker, Chairman, Search Committee, Department of Biology, Cleveland State University, East 24th and Euclid Avenue, Cleveland, OH 44115.** Application deadline: February 28, 1993. *Equal Opportunity Employer, M/F/D. CSU provides reasonable accommodation for individuals with disabilities.*

ASSISTANT PROFESSOR level, COMPARATIVE ANIMAL PHYSIOLOGY. Tenure-track position beginning fall semester 1993, contingent upon funding. Ph.D. or equivalent with commitment to both teaching and research. Two courses per semester, Human Physiology for majors, Anatomy and Physiology for non-majors, participation in general biology and general education courses, advanced course in area of specialty, supervision of undergraduate and M.S. research. Send statement of teaching and research interests, curriculum vitae, transcripts, and three letters of reference to: **Dr. Lee Christianson, Chair, Department of Biological Sciences, University of the Pacific, Stockton, CA 95211.** *Women and minority candidates encouraged to apply.*

Research And Postdoctoral Opportunities In The Biomedical Sciences.

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

Cell Biology and Biochemistry

Maria L. Dufau, MD, PhD

Position is available to conduct and supervise research on the actions of neuropeptide hormones and amines on testis function. Applicants must have at least four years of postdoctoral training and experience in techniques of cell biology and biochemical endocrinology. These should include testis cell culture, peptide and receptor characterization, radioimmunoassays and bioassays for peptide hormones, HPLC analysis, and evaluation of signal transduction and steroidogenic pathways. Experience with evaluation of peptide releasing factors and neurotransmitters and their receptors and actions in the testis is also required. Endocrinology and Reproduction Research Branch (OE-26), NICHD, Building 10, Room B1L400.

Cell Cycle Control and Carcinogenesis

Richard S. Paules, PhD

Signal transduction mechanisms regulating the progression of mammalian cells through the cell cycle, and how those control mechanisms are altered in neoplastically transformed cells, are being investigated. Studies focus on alterations in cell cycle check point controls induced by oncogene and mutated tumor suppressor gene products and by exposure to selected environmental agents. Candidates should have experience in molecular biology, cell biology, or biochemistry and less than five years of postdoctoral experience. Laboratory of Environmental Carcinogenesis and Mutagenesis (OE-26), NIEHS, P.O. Box 12233, MD E4-02, Research Triangle Park, NC 27709-2233.

Drug-DNA Interactions

Miriam C. Poirier, PhD

A clinically-relevant research project is investigating the interactions between DNA and platinum chemotherapeutic agents. DNA adduct formation is being monitored in cancer patients receiving platinum-drug therapy using experimental approaches which include biochemistry, immunoassays, immunohistochemistry, and basic molecular biology. Applicants must be US citizens or permanent residents to be eligible for this Biotechnology Fellowship. Laboratory of Cellular Carcinogenesis and Tumor Promotion (OE-26), NCI, Building 37, Room 3B25.

Environmental Carcinogenesis and Mutagenesis

Raymond W. Tennent, PhD

Biological and molecular aspects of cancer induction in transgenic mice and cell culture models are studied to develop an integrative picture of the origins and development of spontaneous tumors and tumors induced by environmental agents. Candidates should have experience in molecular biology, genetics, biochemistry or a related field and five or fewer years of postdoctoral experience. Laboratory of Environmental Carcinogenesis and Mutagenesis (OE-26), NIEHS, P.O. Box 12233, MD E4-02, Research Triangle Park, NC 27709-2233.

Neuroendocrinology and Neuroimmunology

Eva Mezey, MD, PhD

Two positions are available to study the regulation of immune function in the gastrointestinal system by the CNS and the role of CNS catecholamines in stress. Experience in neuroanatomy and neuroanatomical techniques, molecular biological techniques, *in situ* hybridization, histochemistry, experimental surgical techniques, and basic immunology is preferred. Candidates must have five or fewer years of postdoctoral experience. Clinical Neuroscience Branch (OE-26), NINDS, Building 36, Room 3A17.

Prion Protein and Neurodegenerative Disease

Byron Caughey, PhD

Scrapie-associated prion protein accumulation is being developed as a model of neurodegenerative amyloidosis in order to explore therapeutic strategies for treating transmissible spongiform encephalopathies (TSE) and other amyloidoses such as Alzheimer's disease. Current research focuses on prion protein biosynthesis and the mechanism of action of recently identified inhibitors of amyloidogenic prion protein accumulation in a cell culture system. Experience in protein biochemistry, ligand binding studies, intracellular membrane trafficking, conformational analysis, glycosaminoglycans, or the TSE field is preferred. Laboratory of Persistent Viral Diseases (OE-26), NIAID, Rocky Mountain Laboratories, Hamilton, MT 59840.

Additional Postdoctoral Fellowship Opportunities

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

A catalog describing NIH research opportunities may be accessed via the network-based (Internet) Gopher Information System. Configure your software to point to "gopher.nih.gov" and port "70" to access NIH Gopher and then choose *NIH Information* to reveal the *NIH Office of Education* directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

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



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POSITIONS OPEN

COMPARATIVE ANATOMIST

Tenure-track position, **ASSISTANT PROFESSOR**, starting September 1993. Teaching includes comparative vertebrate anatomy and general zoology. Research program involving undergraduates expected. Send letter addressing teaching and research interests, curriculum vitae, and up to three reprints, and have three reference letters sent to: **Dr. Samuel Zeveloff, Chair, Department of Zoology, c/o Human Resource Department, Weber State University, Ogden, UT 84408-1016. Telephone: 801-626-6165; FAX: 801-626-7445. Deadline: March 15, 1993. WSU is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSORS OF BIOLOGY

The Department of Biology seeks applications for two tenure-track positions beginning September 1, 1993. Primary teaching responsibility will be in the area of organismal zoology for one position, and microbiology for the other. In addition, each person will be encouraged to offer advanced courses in area of expertise, and will be expected to develop strong research programs involving graduate and undergraduate students. Active pursuit of grants will also be expected. A Ph.D. is required and two years of post-doctoral experience are preferred. Send curriculum vitae, a statement of teaching and research interests, selected reprints, and three letters of recommendation by February 26, 1993 to: **Faculty Search, Dr. Dorothy E. Pumo, Chairperson, Department of Biology, 114 Hofstra University, Hempstead, NY 11550. Hofstra University is an Affirmative Action/Equal Opportunity Employer. Applications from females and minority group members are strongly encouraged.**

ASSISTANT PROFESSOR OF PHARMACEUTICS

The Department of Pharmaceutics of the Philadelphia College of Pharmacy and Science invites applications for a tenure-track position at the Assistant Professor level. Applicants should have a Ph.D. in Pharmaceutical Sciences or related fields, with a strong commitment to teaching in the professional and graduate programs, and to developing an active research program. Opportunities for cooperative research are excellent and encouraged.

Review of applicants will begin during the spring 1993 semester, and will continue until the position is filled. Applicants should submit curriculum vitae and the names and addresses of three references to: **Anil P. D'mello, Ph.D., Department of Pharmaceutics, Philadelphia, PA 19104-4495. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS UNIVERSITY OF MONTREAL MAISONNEUVE-ROSEMONT HOSPITAL

Candidates are sought at the level of **ASSISTANT PROFESSOR**. Candidates with Ph.D. degree, or equivalent, and with at least three years of postdoctoral training in the area of nephrology (sodium transport) or renin-angiotensin system (RAS) will be considered. Applicants with a solid background in molecular biology and in the regulation of gene expression will be given priority. The responsibilities of this position include development of an active, independent research program and participation in graduate student teaching programs either at the Research Center or at the University. Knowledge of French is a definite asset but not obligatory. Applicants should send curriculum vitae, a summary of proposed research and three letters of reference before March 1, 1993 to: **Dr. John S.D. Chan, Director, Laboratory of Molecular Nephrology and Endocrinology, Maisonneuve-Rosemont Hospital, Research Center, 5415 boulevard de l'Assomption, Montreal, Quebec, Canada H1T 2M4. (In accordance with Canadian Immigration requirements, priority will be given to Canadian Citizens and permanent residents of Canada).**

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POSITIONS OPEN

TWO FACULTY VACANCIES IN BIOLOGY

SOUTHWEST TEXAS STATE UNIVERSITY

The Department of Biology, Southwest Texas State University (SWT), seeks applications for two tenure-track **ASSISTANT PROFESSOR**-level positions available 1 September 1993. Applicants must have a Ph.D. by the time of appointment and postdoctoral experience is desired. The successful candidates are expected to develop competitive research programs in the area of their specialty and to teach and advise undergraduate and Master's-level students. (1) **Population Biologist** with a strong field orientation and interest in ecology, genetics, and evolution. Research expertise in conservation biology or trophic interactions will be of particular interest. (2) **Microbiologist** with a background in bacteriology and microbial physiology. The successful applicant will teach one undergraduate course in general microbiology and develop a graduate/upper division course in area of expertise. Applicants should send curriculum vitae, statement of teaching and research interests, and three letters of reference. Screening begins 20 February 1993 and will continue until suitable candidates are hired. Inquiries are to be addressed to: **Dr. Francis L. Rose, Chair, Biology Department, Southwest Texas State University, San Marcos, TX 78666. Telephone: (512) 245-2178, FAX: (512) 245-8095. Southwest Texas State University is located in the beautiful Hill Country of central Texas, halfway between Austin and San Antonio. University enrollment is 21,302. The Biology Department has 33 faculty, 930 majors, and 100 graduate students. SWT is an Equal Opportunity/Affirmative Action Employer and encourages applications from members of affected groups.**

ASSISTANT PROFESSOR PHARMACOLOGY

The University of Illinois College of Medicine at Rockford has an available tenure-track position in the Department of Biomedical Sciences at the rank of **ASSISTANT PROFESSOR OF PHARMACOLOGY**. The emphasis will be excellence in research. The specific research area is open but individuals will be expected to develop an independent, reputable, and externally fundable research program. Starting date is negotiable but is expected to be early fall 1993. Start-up funds are available. Contribution to a team-taught course in Medical Pharmacology is expected. Submit curriculum vitae, a short statement of research interests and teaching experience, and the names and addresses of three references to: **Chair, Pharmacologist Search Committee, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107-1897. Screening of candidates will begin 15 April 1993 and will continue until the position is filled. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

ECOLOGIST. The Department of Biology at The College of St. Catherine (CSC) seeks a biologist to fill a rolling contract position (renewable every three years) at the level of **ASSISTANT PROFESSOR** beginning in the fall of 1993. Doctoral degree and demonstrated excellence in teaching in both lecture and laboratory format is required. Postdoctoral experience is preferred. The successful candidate must be committed to enhancing the field biology component of our curriculum and will develop a research program in which undergraduates can participate. Courses to be taught include ecology, plant biology, and introductory environmental courses for both majors and non-majors. Send curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching and research interests to: **Dr. Kathleen A. Tweeten, The College of St. Catherine, 2004 Randolph Avenue, St. Paul, MN 55105. Application deadline is February 22, 1993. CSC is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSISTANT PROFESSOR

The Department of Neurosurgery at the University of Utah has one position available for Director of Neurosurgical Engineering Laboratory at the Research Assistant Professor level. Letters expressing interest along with current curriculum vitae may be submitted to: **M. Peter Heilbrun, M.D., Professor and Chair, Department of Neurosurgery, 50 North Medical Drive, Salt Lake City, UT 84132. Deadline for receipt of applications is February 15, 1993. The University of Utah is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR MARINE ORGANIC GEOCHEMISTRY

The Department of Marine Sciences, the University of Connecticut, announces an anticipated 9-month tenure-track assistant/associate professor position in marine organic geochemistry, anticipated for 1 September 1993. Applicants should have a Ph.D. in oceanography/marine sciences or a related field with expertise in coastal, process-oriented research. Candidates must have at least three years of specialized experience, preferably at post-doctoral level, and be able to interact with the activities in the field of biological oceanography. The successful applicant is expected to establish a strong research program, advise and support graduate students (M.S. and Ph.D.) and teach at the undergraduate and graduate level. Salary commensurate with qualifications and previous experience. Applicants should send a résumé, a statement of research and teaching interests and names of three references to: **Chair, Organic Geochemistry Search Committee, Department of Marine Sciences, University of Connecticut, Groton, CT 06340. Screening will begin 28 February 1993 and continue until the position is filled. We encourage applications from underrepresented groups, including minorities, women and people with disabilities. (Search #3A150).**

FACULTY POSITIONS CORNELL UNIVERSITY MEDICAL COLLEGE DEPARTMENT OF PHARMACOLOGY

Candidates are sought for three tenure-track positions at the level of **ASSISTANT or ASSOCIATE PROFESSOR**. Candidates with interests in a wide range of areas will be considered, including molecular pharmacology, neuropharmacology, clinical pharmacology, drug metabolism, drug/receptor interactions, and signal transduction mechanisms. The responsibilities of this position include development of an active, independent research program and participation in both medical and graduate student teaching programs in the department. Applicants should send curriculum vitae, a summary of proposed research, and should arrange to have letters sent from at least three scientists who can evaluate the candidate's accomplishments. Cornell University Medical College is a part of the New York Hospital-Cornell Medical Center and adjacent to Memorial Sloan-Kettering Cancer Center and Rockefeller University. Applications should be sent to: **Chair, Pharmacology Search Committee, c/o Room E-409, Pharmacology Department, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Equal Opportunity/Affirmative Action Employer, M/F/H/V.**

FACULTY POSITION. The Department of Biochemistry and Molecular Biology in the College of Medicine solicits applications for a state-funded, full-time (12-month) tenure-track position as **ASSISTANT PROFESSOR**. Applicants at other levels will be considered. Applicants should have a Ph.D. and/or M.D. degree, postdoctoral experience, and demonstrated excellence in research. The successful candidate will occupy laboratories in the new Arkansas Cancer Research Center. He/she will be expected to develop a funded research program **relatable to cancer**, and to contribute to teaching medical and graduate students. Applicants should submit curriculum vitae, a brief statement of proposed research, and the names and addresses of three references to: **Charles G. Winter, Department of Biochemistry and Molecular Biology, Slot 516, College of Medicine, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205, by 15 February 1993. UAMS is an Equal Opportunity/Affirmative Action Employer.**

TERRESTRIAL PLANT ECOLOGIST. Tenure-track, **ASSISTANT PROFESSOR**, to teach terrestrial ecology, general ecology and graduate-level plant ecology and rotate into general education and/or major core courses, direct plant ecology master's degree projects, and interact with state and federal agencies. Ph.D. required. Recent research experience preferred. Send curriculum vitae, transcripts, at least three letters of recommendation to: **Dr. Ronald L. Evans, Chair, Department of Biology, California State University, Fresno, CA 93740-0073. Closing date: March 15, 1993. Equal Opportunity/Affirmative Action Employer.**

**SCIENCE
IN EUROPE**
24 April
Science Reprint



Reprinted from the 24 April issue of **SCIENCE**, this 22-page special section takes an in-depth look at the changes taking place in the European scientific community.

Special news reports discuss changes and developments in European molecular biology, neurobiology, astronomy and high energy physics, as well as an assessment of European scientific productivity. In addition, eight leading figures in the scientific community, including Sir Walter Bodmer, Carlo Rubbia, and Lennart Phillipson present their views on where science in Europe is headed.

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DEAN

COLLEGE OF NATURAL & AGRICULTURAL SCIENCES University of California, Riverside

The University of California, Riverside, invites applications and nominations for the position of Dean of the College of Natural and Agricultural Sciences. The faculty of the College have the threefold responsibilities of the Land-Grant mandate in teaching, public service and direction of basic and applied as well as mission-oriented research in all aspects of the natural sciences and agriculture. Currently, the College has an enrollment of approximately 2,170 undergraduates and 555 graduate students in 20 undergraduate and 19 graduate programs in the following academic departments and research units: Biochemistry, Biomedical Sciences, Biology, Botany and Plant Sciences, Chemistry, Dry Lands Research Institute, Earth Sciences, Entomology, Institute of Geophysics and Planetary Physics, Mathematics, Nematology, Neuroscience, Physics, Plant Pathology, Soil and Environmental Sciences, and Statistics. On academic matters the Dean reports through the Executive Vice Chancellor to the Chancellor. The Dean also is responsible for the campus-based, mission-oriented programs of the statewide Division of Agriculture and Natural Resources, including research programs of the Agriculture Experiment Station and public service programs for Cooperative Extension.

The College and the Agricultural Experiment Station hold 630,973 assignable square feet of space and 1,390 acres of agricultural research land; and in addition administers seven off-campus holdings of the UC Natural Reserve System, comprising 28,159 acres. The College and the Agricultural Experiment Station have approximately 240 ladder-rank FTE, 30 Cooperative Extension and other academic FTE, and 476 non-academic staff FTE. The total College budget is over \$35 million. Approximately one-half of the College budget is allocated to the support of faculty and programs in the Agricultural Experiment Station and Cooperative Extension.

The Chancellor and faculty seek candidates with primary commitment to academic excellence to lead the college. Applicants must have a distinguished record of research, teaching and public service appropriate to an academic appointment at the level of full professor in the College department of the candidate's discipline as well as a record of successful leadership and creative management. Salary will be commensurate with experience and qualifications. The target date for starting the position is July 1, 1993.

Review of applications will begin March 1, 1993, and continue until the position is filled. Nominations and applications, including a letter of application, resume, and the names and addresses of five references, should be sent to: **Sharon Vander Veen, Search Committee for the Dean of the College of Natural and Agricultural Sciences, Office of the Chancellor, University of California, Riverside, CA 92521.**

The University of California, Riverside, a comprehensive Land-Grant research campus located in Southern California, is the most rapidly growing campus of the University of California. In the fall of 1992, approximately 8,800 students are enrolled in three colleges (Natural and Agricultural Sciences, Humanities and Social Sciences, and Engineering) and two professional schools (Education and the Graduate School of Management). The campus is surrounded by a supportive and rapidly growing external citizenry, including the municipality of Riverside and a number of communities in an area known as the Inland Empire of California. UCR is an equal opportunity/affirmative action employer.



WOMEN IN SCIENCE

March 13 Reprint

This first-time special section takes an in-depth look at women in science.

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Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area, approximately 30 miles north of Chicago. For confidential consideration, please send a resume and salary history to: Ann Ribbens, Corporate Staffing, Job# 19130, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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P O S T D O C T O R A L F E L L O W S H I P S

Two postdoctoral positions are available in the signal transduction group. The fellows will conduct basic research on novel protein tyrosine phosphatases and on G-linked hormone receptors. The studies may include cloning, expression, site-directed mutagenesis and protein analysis of signal transduction proteins, with opportunity to do transgenic and gene knockout experiments. The postdocs will be offered a stimulating intellectual environment, access to state-of-the-art methods and instruments, highly competitive compensation, and training to prepare for an academic or industrial career.

For immediate and confidential consideration, please send your resume to: **Dept. AAMD/POST, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.**

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TRUDEAU INSTITUTE

A POSTDOCTORAL POSITION in IMMUNOLOGY is available for a person with training in cellular and/or molecular immunology to study basic immunology and the immune response to infections. Future appointment to staff is possible depending on performance.

THE TRUDEAU INSTITUTE is a not-for-profit, basic research Institute with modern facilities, up-to-date equipment, in-house animal production and an international reputation for excellence. The Trudeau Institute is located on the shore of Saranac Lake, 8 miles from Lake Placid. Competitive salary and fringe benefits are offered and institute housing will be made available.

Applications consisting of a curriculum vitae, the names and addresses of three references should be addressed to:

Robert J. North, Ph.D., D.Sc.
Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983

Postdoctoral Research Opportunities in Breast Cancer Research



The Vincent T. Lombardi Cancer Research Center Georgetown University Medical Center

An integral component of the Specialized Programs of Research Excellence (SPORE) in Breast Cancer grant recently awarded to the Lombardi Cancer Center is the training of new investigators for a career in translational research. The goals of the program include the development of individuals having the capability to move basic research findings into applied research settings with patients and populations. Four postdoctoral positions are immediately available. Successful applicants will have the opportunity to choose a mentor from among an interactive group of 14 peer reviewed and funded investigators who are currently committed to breast cancer research at Georgetown University. Research programs cover the development of novel anticancer therapies, the evaluation of prognostic indicators, and the determination of the genetic and molecular mechanisms that underly the malignant progression, acquisition of drug resistance, loss of estrogen sensitivity, and increased metastatic potential of breast cancer cells. Complete descriptions of individual research programs are available upon request. Salary is competitive and commensurate with qualifications and experience.

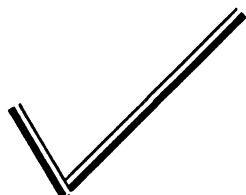
Applications from women and minorities are encouraged. Applicants should have a Ph.D. or M.D. Please send curriculum vitae, a short statement of research interests and goals, and the names and addresses of three references to:

Breast Cancer SPORE Postdoctoral Training Program
C/O Marc E. Lippman, M.D.

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RESEARCH SCIENTISTS

General Atomics' Biociences Division is seeking talented and motivated biologists to establish new research initiatives in macromolecule synthesis and bioremediation. You will work in a multidisciplinary environment and be challenged to develop innovative bioprocesses, bioreactors, and genetically engineered microorganisms. Specific projects will be customized to the strengths and interests of each candidate. Presentation of results at national meetings and publications in refereed journals is encouraged.

Biomolecule Synthesis. Candidates should have a Ph.D., strong background in molecular biology or biochemistry, and expertise in recombinant techniques, protein purification, bioreactors, and DNA synthesis. The research will focus on developing novel macromolecules, and improved methods for producing and purifying macromolecules, for the biotech research community.

Bioremediation. Candidates should have a Ph.D., strong background in molecular or microbiology, and expertise in biotreatment systems, recombinant techniques, and optimizing biodegradation under a variety of circumstances. The research will focus on developing environmental diagnostics and genetically modified microorganisms for use in specific biotreatment systems.

General Atomics has been engaged in a wide range of high technology R&D for over 30 years and is currently developing mapping and sequencing technologies for the National Human Genome project. These positions offer a unique opportunity within the company's exploratory research group which is committed to providing the resources and environment necessary to stimulate scientific creativity. Recent Ph.D. graduates with a strong record of accomplishment are also encouraged to apply.

GA offers excellent compensation/benefits and an outstanding work environment including a complete fitness center. We are located on a campus-like setting on Torrey Pines Mesa, one of the most beautiful areas of San Diego.

For prompt consideration, please forward a CV and statement of research interests to: Dept. 83-3, General Atomics, P.O. Box 85608, San Diego, CA 92186-9784. EOE/Principals only, please.



**GENERAL
ATOMICS**

POSITIONS OPEN

ASSOCIATE DIRECTOR FERMENTATION AND BIOPROCESS FACILITY

The Center for Recombinant Gamete Contraceptive Vaccinogens (CRGCV) is seeking applicants for Associate Director of a Fermentation and Bioprocess Facility currently under construction within the Medical Sciences complex at the University of Virginia. The CRGCV is a multiinstitutional NIH-sponsored center dedicated to the identification and production of gamete proteins as components of a human contraceptive vaccine. The Fermentation and Bioprocess Facility will be responsible for the production and purification of recombinant protein vaccine doses under GLP for use in fertility trials. Qualifications should include either a Master's degree or Ph.D. in Biochemistry, Microbiology or Chemical Engineering with some experience in scale-up fermentation or separations. Experience with recombinant proteins preferred. Send curriculum vitae and names of three references to: **J. M. Kitchen, Center for Recombinant Gamete Contraceptive Vaccinogens, Department of Anatomy and Cell Biology, University of Virginia Health Sciences Center, Box 439, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DEAN for Research and Graduate Studies. College of Human Sciences, available July 1, 1993. Assist in grant acquisition, graduate recruitment and funding; maintain graduate records; teach and research. Earned doctorate; credentials for associate/full professor; research, graduate education and grant record; administrative experience. Screening begins March 1, 1993. Application, curriculum vitae, and names, addresses and telephone numbers of at least 3 references should be sent to: **Emily Haymes, R-86, Chair, Associate Dean Search Committee, College of Human Sciences, Florida State University, Tallahassee, FL 32306-2033.** *Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF BRISTOL CHAIR IN PATHOLOGICAL SCIENCES

Applications are invited for a Chair in Pathological Sciences within the University Department of Pathology and Microbiology. Appropriate candidates for this new post, which is available together with substantial research funding, will be established researchers of international standing in some field of biomedical science related to pathology or microbiology and with a background in science, medicine or veterinary science. The salary will be at non-clinical or clinical professorial rates as appropriate. The successful candidate will contribute to the teaching of undergraduate and postgraduate students. The possible appointment to the Headship of the Department will be discussed with each candidate individually.

Further particulars may be obtained from: **Personnel Office (EO), University of Bristol, Senate House, Bristol BS8 1TH**, quoting reference B102 or by Telephone: (0272) 256450, or FAX: (0272) 259473.

Informal inquiries and visits to the Department may be made through **Dr. David Billington** (Head of Honours School of Cellular and Molecular Pathology): (0272) 303444.

Closing date for applications is 12 March 1993.
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DIRECTOR CARDIOTHORACIC IMAGING RESEARCH CENTER

The University of Pennsylvania seeks an experienced cardiathoracic imaging researcher who can provide a bridge between clinicians and basic researchers involved in cardiathoracic imaging as a clinical or investigative tool. Will work with state-of-the-art imaging facilities, including MRI, high speed CT and PET and SPECT.

Must qualify for Faculty position in the University of Pennsylvania; level of the position determined by experience. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.* Contact: **Leon Axel, Ph.D., M.D., Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104.**

POSITIONS OPEN

DIRECTOR, MUSEUM UNIVERSITY OF COLORADO

The University of Colorado Museum is a natural history museum with six administrative sections: Zoology, Geology, Entomology, Botany, Anthropology and Public Education. The Director should have a doctorate in a cognate field, a superior record of scholarly achievement, and administrative ability. Responsibilities include providing strong leadership for the Museum, fund raising, and managing academic and outreach programs. The Director must qualify for a tenured faculty appointment in one of the cognate departments (Anthropology, Biology, Geography, Geology). Nominations and applications should be directed to: **Chair, Search Committee, Director of Museum Search, Campus Box 40, University of Colorado, Boulder, CO 80309.** Applicants should provide a letter of interest, curriculum vitae, four letters of reference and statements of research, teaching and curatorial interests. The committee will begin consideration of applications on March 1, 1993 but will accept applications until the position is filled. The desired start date for the position is July 1, 1993. *The University of Colorado at Boulder has a strong institutional commitment to the principal of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities, and disabled individuals. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.*

CHAIR DEPARTMENT OF PHYSIOLOGY

The Department of Physiology is a research-intensive department in the Faculty of Medicine. Its 20 full-time faculty and an equal number of part-time faculty are committed to basic and applied research, a large graduate program, and undergraduate teaching in the Faculties of Medicine, Dentistry, Science, Applied Health Sciences, Nursing, and Kinesiology. Primary research areas in physiology include: Neurosciences, Gastrointestinal, Cardiovascular, Cellular, and Fetal, Neonatal, and Reproductive Endocrinology. Candidates should hold a Ph.D. (or equivalent) in Physiology and have demonstrated excellence in research, academic leadership, and management skills.

Please send application with curriculum vitae and the names and addresses of three persons prepared to provide a reference to:

**Dr. R.Y. McMurtry, Dean
Faculty of Medicine
Health Sciences Centre
The University of Western Ontario
London, Ontario, CANADA N6A 5C1**

Positions are subject to University budget approval. *In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian Citizens and Permanent Residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities. Deadline for submission: March 15, 1993.*

COORDINATOR of the Caltech Resource Center for Women/Center for Women in Science and Engineering. The mission of the Center is to promote the education and careers of all women at Caltech; faculty, students, and staff, especially in science and engineering. The Coordinator will organize workshops, seminars, and educational programs to heighten awareness of gender issues and foster equality throughout the Caltech community. The deadline for applications is February 28, 1993. Please send a résumé and have three letters of recommendation sent to: **Women's Center Search Committee, Mail code 147-75, Caltech, Pasadena, CA 91125.**

POSTDOCTORAL POSITION

Postdoctoral Position in signal transduction is available March 1, 1993 to study *Paramecium* chemoreception using electrophysiology, molecular biology and ion-sensitive fluorescent dyes. Send curriculum vitae and names, addresses and telephone numbers of three references to: **Dr. Judith Van Houten, University of Vermont, Department of Zoology, Marsh Life Science Building, Burlington, VT 05405.** Telephone: 802-656-2922; FAX: 802-656-2914.

POSITIONS OPEN

PROGRAM OFFICER AIDS RESEARCH

The National Research Council is seeking a Program Officer for the Institute of Medicine's 18-month project assessing AIDS research at the former Alcohol, Drug Abuse and Mental Health Administration. Responsibilities include assisting the study director in study design; research and analysis; taking responsibility for study segments; drafting portions of the final report; and working with the study committee. Requires an M.A./M.S. or equivalent in behavioral or biomedical science, or a health-related field and at least 4 years of experience. Familiarity with AIDS, molecular biology, substance abuse or mental health, and experience in social-behavioral science, health-related research, policy activity desirable. Requires demonstrated skills in library research, analysis, oral and written communication, and ability to work independently. Please send cover letter and résumé in confidence to: **NRC/IOM, FO-3020 (JA), 2101 Constitution Avenue, NW, Washington, DC 20418.** *Equal Opportunity Employer.*

INSTRUCTOR POSITIONS Department of Environmental, Population, and Organismic Biology University of Colorado, Boulder

The Department of Environmental, Population, and Organismic Biology seeks applicants for three full-time instructor positions. All positions are non-tenure-track and emphasize teaching, but allow modest allocation of time for research.

Allied Health Instructor. Duties include: (1) responsibility for multiple sections of Human Anatomy and Human Physiology laboratories (with supervision of teaching assistants), (2) demonstration of Human Anatomy through use of cadavers; (3) support of teaching in Comparative Anatomy and Comparative Physiology. Ph.D. required and cadaver experience strongly preferred.

General Biology Instructor. Duties include: (1) responsibility for multiple sections of General Biology laboratory (with supervision of teaching assistants), (2) continual review of laboratory operations, logistics, and revision of laboratory exercises, (3) support of microbiology laboratories. Ph.D. required; knowledge of microbiology preferred.

Writing Instructor. Duties include: teaching of writing skills to multiple small sections of biology majors. Ph.D. or master's with appropriate experience.

For all positions, salaries range between \$24,000 and \$30,000. Submit résumé, three letters of reference, and a statement of interest to: **Instructor Search Committee, Department of Environmental, Population, and Organismic Biology, Campus Box 334, University of Colorado, Boulder, CO 80309-0334** before 1 March 1993.

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

POSTDOCTORAL POSITION

A postdoctoral position will become available approximately March 1, 1993 to investigate the role that alterations in the methylation status of DNA might play in the aberrant expression of protooncogenes involved in carcinogenesis. We employ mouse liver tumorigenesis as our model system. I am seeking an enthusiastic individual who possesses a doctorate degree in one of the biomedical sciences, good communication skills and the capability of applying biochemical and molecular biological techniques to the research problem at hand. Interested individuals should send curriculum vitae, a letter of application containing a brief description of their research experience, and the names, addresses and telephone numbers of three references to: **Dr. Jay I. Goodman, Department of Pharmacology and Toxicology, Michigan State University, B-440 Life Sciences Building, East Lansing, MI 48824.**

Michigan State University is an Affirmative Action/Equal Opportunity Institution.

POSTDOCTORAL POSITIONS available immediately. Experience in cloning and expression, preferably of glycoprotein hormones and receptors. Send curriculum vitae to: **Dr. O. P. Bahl, Department of Biological Sciences, State University of New York at Buffalo, 347 Cooke Hall, Buffalo, NY 14260.** *SUNY is an Equal Opportunity/Affirmative Action Employer.*

**Wake Forest University Medical Center
Postdoctoral Training Program in Cellular
and Molecular Biology**

Four positions are available for training in the areas of enzymology, molecular biology, signal transduction and in vivo NMR spectroscopy as applied cellular and tissue physiology.

Dr. Carol Cunningham - in vivo NMR spectroscopy will be utilized to study the effects of chronic ethanol consumption and oxygen tension on hepatic energy metabolism. The major emphases in the laboratory are on bioenergetics, mitochondrial biogenesis and ATP synthase - phospholipid interactions.

Dr. Linda McPhail - Projects in the area of signal transduction mechanisms responsible for the cytokine priming and receptor-mediated activation of the respiratory burst enzyme (NADH oxidase) in human neutrophils are available. Areas of focus include phospholipase D and protein kinases (MAP kinase and PKC isoforms).

Dr. Moseley Waite - Lipoprotein metabolism by liver cells will be studied using biochemical, biophysical and molecular biology techniques. Emphasis is placed on the mechanisms of HDL metabolism and reverse cholesterol transport.

Dr. Susan Hutson - Structure-function relationships in a novel bifunctional transaminase/transport protein involved in mitochondrial amino acid metabolism will be studied using molecular biology techniques and kinetic analysis.

Individuals interested in applying should send c.v. and names of three references to one of the above, Department of Biochemistry, Wake Forest University Medical Center, Winston-Salem, NC 27157. Telephone: (919) 716-4254. Equal Opportunity/Affirmative Action Employer.



Avigen is an exciting new gene therapy company that is developing treatments for selected diseases using adeno-associated viral (AAV) vectors to insert genes into patients' cells. The company believes that its proprietary gene delivery system represents a major step forward in the clinical utility and commercialization of gene therapy. Our initial programs will be concentrated in the areas of sickle cell anemia, antivirals for HIV, and chemotherapeutic drug tolerance. The company has openings for outstanding individuals in the following areas:

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This individual will be responsible for the overall direction of the company's research programs. Applicants must have a Ph.D. or M.D. and at least 10 years of post graduate experience in a cutting edge research environment. Candidates with a background in hematopoiesis and/or virology and at least 2 years experience in a biotech or pharmaceutical company, including management responsibilities, will be given a strong preference.

Virologist

The successful candidate will carry out innovative research in our exciting antiviral program. Applicants must have a Ph.D. or M.D. and post graduate research experience in molecular biology and virology, particularly HIV biology. Candidates with biotech experience will be given a preference.

Hematologist

This individual will conduct state of the art research in our sickle cell anemia program. Applicants must have a Ph.D. or M.D. and postgraduate research experience in hematopoiesis and molecular biology. Candidates should have previous experience in a biotechnology or pharmaceutical company.

Purchasing Manager/Laboratory Manager

This individual will set up and manage all aspects of the company's purchasing and laboratory support departments. Candidates with a BS and a strong technical background in molecular biology or cell biology will be given a preference.

Avigen is committed to providing exciting career opportunities to creative, highly motivated individuals. We are an equal opportunity employer. Submit resumes to: Human Resources, Avigen, Inc., 1201 Harbor Bay Parkway #1000, Alameda, CA 94501.

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Upcoming job fairs in Cambridge, MA; La Jolla, CA; Bethesda, MD; and RTP, NC. For more information or to pre-register, call (805) 494-3856 or fax (805) 494-1870. Hosted by Career Connection, P.O. Box 1698, Thousand Oaks, CA 91358-0698.

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Application Information

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Application Deadline: February 15, 1993. Applicants must be US citizens or permanent residents.

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The UCLA School of Medicine is recruiting for the position of Professor, Chair of the Department of Ophthalmology, Director of the Jules Stein Eye Institute. He/She will provide leadership for the teaching, clinical and research programs of the Department and the Institute. Candidates are expected to have outstanding leadership qualities. Please submit curriculum vitae to:

Dr. Robert Baloh, Chair
Search Committee, Chair of
Ophthalmology
Department of Neurology
University of California
Los Angeles, CA 90024-1769

The University of California is an Equal Opportunity Employer. Applications from women and minorities are strongly encouraged.



Product Development Opportunities

ChemTrak, Inc., a leader in the easy-to-use and non-instrumented Accumeter diagnostics tests for the worldwide point-of-care and consumer retail markets is seeking strong candidates to join its Research and Development department.

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The individual will develop and perform experiments with minimum supervision, in the areas of protein immobilization, conjugation, colloidal gold or enzyme color signal system development on solid supports.

Candidates with Ph.D. in Biochemistry, Immunochemistry or Analytical Biochemistry are preferred.

ChemTrak is located in the San Francisco Bay area and offers competitive salary, comprehensive benefits package and employee stock purchase plan. Send resume with salary history to: ChemTrak, Inc., Human Resources, 929 E. Arques Ave., Sunnyvale, CA 94086. We are an Equal Opportunity Employer.

Assistant Professor of Cellular/ Molecular Plant Biology

Applications are invited from broadly trained biologists for a new tenure-track position (subject to budgetary approval) in cellular/molecular plant biology with a specialization in, e.g., physiology, pathology or development. The successful candidate will be expected to:

1. Participate in one or more of the following required courses: genetics, ecology, cell biology, molecular biology, plant physiology, or plant diversity;
2. Develop an active research program involving undergraduate students;
3. Advise students and participate in general departmental administration.

SUNY-Geneseo is a highly selective college with a student body of 5000 students. The biology department has over 600 majors in biology and biochemistry programs and has a very strong commitment to undergraduate education.

The successful candidate will complement 14 other faculty members with diverse specialties in zoology, behavioral ecology, physiological plant ecology, developmental biology, animal physiology, cell ultrastructure, systematics for parasitic helminths, aquatic invertebrate biology, algal genetics, molecular biology, immunology, plant biology, forest ecology, and microbial ecology.

All applicants must have a Ph.D. in biology or related field and postdoctoral experience. Send curriculum vitae, publications, graduate transcripts, three letters of recommendation and a description of research and teaching interests by 1 March 1993 to Dr. Edwin J. Spicka, Biology Dept., 1 College Circle, State University of New York, Geneseo, NY 14454. FAX: (716)245-5007.

The State University of New York is an A.A./E.O. Employer. Minorities and women are strongly urged to apply.

**TRUDEAU INSTITUTE, INC.
BASIC RESEARCH
SCIENTISTS**

**Associate Professor Level
Infectious Diseases
Immunologist**

A vacancy exists at the associate professor level for an immunologist interested in employing immunological techniques to analyze immunity to infections with microbial pathogens. The successful applicant will be supplied the resources to develop his/her independent research program within the overall infectious disease program of the Trudeau Institute. Persons interested in developing models of immunity to intracellular pathogens are encouraged to apply.

The Trudeau Institute is a well-endowed not-for-profit, basic research institute. Salaries and benefits are competitive, and working conditions are conducive to a productive research career.

Applications consisting of a curriculum vitae, the names and addresses of three references, and a brief description of research interests, should be addressed to:

**Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983**

DEAN, SCHOOL OF SCIENCE AND HEALTH

The William Paterson College of New Jersey invites nominations and applications for the positions of Dean, School of Science and Health.

The School of Science and Health houses Bachelor's degrees in the Departments of Biology, Chemistry and Physics, Communication Disorders, Community Health, Computer Science & Quantitative Analysis, Environmental Sciences & Geography, Exercise and Movement Sciences, Mathematics, and Nursing, as well as a Master of Arts degree in Biology and Master of Science degrees in Biotechnology, and Speech-Language Pathology. The School offers Pre-Medical, Pre-Dental and Veterinary Medicine preparation through its Pre-professional programs. Also affiliated with the School is an Honors Program in Biopsychology. The recipient of a \$3.1 million New Jersey Challenge to Excellence grant and commanding state-of-the-art equipment, the School has established a Center for Research to focus its teaching and research on the rapidly developing areas of biotechnology, biochemistry, environmental science and applied mathematics. The School's 94 faculty members serve approximately 1,225 undergraduate majors and 175 graduate students.

The Dean is the chief academic officer of the School, reports to the Provost and Vice President for Academic Affairs, and is a member of the Deans' Council. S/he is responsible for providing leadership for a complex and diverse school; planning and overseeing the development of its academic programs, and administering the School including budget planning and management, and all personnel matters. The position provides an opportunity to facilitate interaction among scholars and teachers across the disciplines housed within the School and to encourage an integrated multi-disciplinary approach to undergraduate health, nursing, mathematics, and physical and natural sciences education.

The successful candidate must possess personal qualities of leadership and vision; a proven record of success in academic administration and a degree of maturity that enables him/her to work collaboratively with a variety of individuals and groups; prior leadership experience at a significant level of responsibility, preferably at the Dean's level; scholarly accomplishment and teaching experience commensurate with appointment as a Professor in a department in the School, and an earned doctorate in a discipline represented within the School.

The position becomes available September 1, 1993. Salary dependent upon background and experience.

Founded in 1855, The William Paterson College of New Jersey serves approximately 8,000 undergraduate students through its 31 undergraduate programs. Its graduate enrollment numbers approximately 2,000 students in 15 graduate degree programs. The College maintains a strategic commitment to the goals of excellence, diversity and community. On a 250-acre suburban campus 20 miles from New York City, William Paterson College is an accredited state college and an affirmative action/equal opportunity employer.

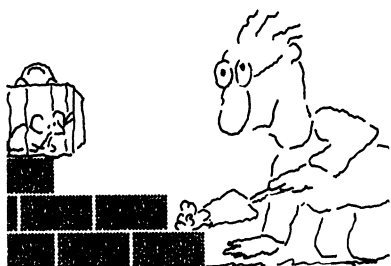
Review of applications will begin on February 20, 1993 and continue until the positions are filled. Applications should be sent along with a letter citing specific accomplishments related to the above criteria, a curriculum vitae, and the names, addresses and telephone numbers of three (3) references who may be contacted at the time of invitation to be interviewed with the approval of the candidate. Please direct material to:

Dr. Susan P. McNamara, Chair, Search Committee, Dean, School of Science and Health



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**MASSEY
UNIVERSITY**

POST-DOCTORAL RESEARCH SCIENTIST Department of Veterinary Pathology and Public Health

This position is available in the Bovine Tuberculosis Research Unit.

The Unit's goal is to develop a recombinant vaccine capable of protecting cattle against tuberculosis. The approach combines comparative studies of the molecular biology of *M. bovis* and *M. bovis* BCG with investigations of the cellular responses of cattle to mycobacterial proteins.

The position is for two years, starting May/June 1993. A salary commensurate with experience, travel expenses and initial accommodation costs will be paid. The Unit has excellent facilities and provides a pleasant research environment.

Applicants should have a PhD in Immunology, or a related field, preferably with experience in cellular immunology. Further information is available from Dr Kevin Moriarty, telephone (64) 6 356-9099, facsimile (64) 6 350-5636.

Reference number Sci 109/92 must be quoted.

Closing date: 28 February 1993.

An information package including Conditions of Appointment is obtainable by telephoning extension 7318.

Applications, including a full curriculum vitae and the names, addresses and fax numbers of three referees should be sent to Mrs V B Bretherton, Personnel Section before the closing date specified.

B.R.H. Monks
Registrar

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(American Association of Immunologists/

Clinical Immunology Society)

American Association for Cancer Research

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NIH Research Week

September 17 Issue - Deadline: Aug. 31

American Society of Human Genetics

Lab Expo & Conference

October 1 Issue - Deadline: Sept. 14

Biotechnica

October 8 Issue - Deadline: Sept. 21

Human Genome

October 15 Issue - Deadline: Sept. 28

October 22 Issue - Deadline: Oct. 5

Neuroscience

October 29 Issue - Deadline: Oct. 12

Medica '93

MAC

November 5 Issue - Deadline: Oct. 19

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Research Molecular Biologists

Pfizer, a U.S. based multinational pharmaceutical company, has earned its reputation as a leader in the industry through its continuing commitment to keeping its pharmaceutical research at the forefront of biomedical science and therapeutic innovation. Consider these exciting research opportunities in the Molecular Genetics and Protein Chemistry Department located at our Central Research Laboratories in Groton, Connecticut.

Cancer: Pharmacology and Molecular Biology—In collaboration with our Cancer Drug Discovery Group, you will develop strategies to exploit cancer cell selective molecular targets and create approaches towards cancer drug discovery as novel targets are identified. Applicants should have a PhD with at least 2 years of postdoctoral research in cancer molecular biology. Experience in the cloning and characterization of novel genes to the field of tumor cell biology (oncogenes, tumor suppressor genes, etc.) is a strong advantage.

Cardiovascular: Molecular Biology—The Cardiovascular Discovery Group is pursuing the role of growth factors and protooncogenes in cardiac hypertrophy and congestive heart failure. We are seeking candidates with a PhD in Molecular Biology and at least 2 years postdoctoral experience in these areas.

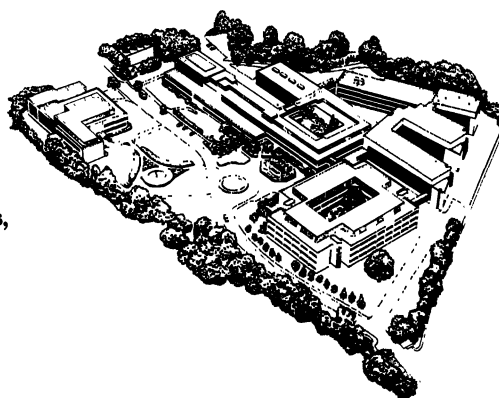
Cartilage: Molecular Biology—The Inflammation Group has an exciting challenge for an individual with strong training in molecular biology and expertise in cartilage metabolism. The successful candidate will have at least 2 years postdoctoral experience and a strong publication record in the area.

Neurobiology: Receptor Structure and Molecular Biology—Become a part of a multidisciplinary team where our current research focus is on the discovery of novel receptors expressed in the central nervous system. Applicants should have a PhD degree with 0-4 years of postdoctoral or industrial experience in molecular biology with emphasis in gene isolation and analysis including: library construction, cDNA cloning, quantitative RNA analysis; DNA sequence analysis; and PCR using degenerate primers. Interest in the molecular biology and biochemistry of neuroreceptors is highly desirable.

Obesity: Gene Transcription—The Molecular Biology Group has considerable interest in the regulation of gene transcription. This position requires a PhD in molecular biology and at least 2 years postdoctoral work in a field such as diabetes or obesity research.

Osteoporosis: Molecular Biology—Our recent move to co-develop risedronate, has created an exceptional opportunity for a scientist with a PhD and at least 2 years experience in the areas of molecular biology and some aspect of bone biology. Familiarity with steroid receptor molecular biology would be a distinct advantage.

In addition to a stimulating research environment, we offer a competitive compensation and benefits package, including generous relocation assistance to this southeastern Connecticut shoreline community. Qualified applicants may send a resume, description of research experience, and names of three references, indicating position desired, to: **Mr. Kym Goddu, Personnel Associate, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



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TRUDEAU INSTITUTE, INC. CELLULAR/MOLECULAR IMMUNOLOGIST

As part of its ongoing recruiting program, the Trudeau Institute is interested in hiring a cellular or molecular immunologist at the level of associate professor. The successful applicant will be provided the resources to develop his/her own research program. Research at the Institute is directed at studying the immune response to infectious agents, cancers, and allografts at the physiological, cellular and molecular levels.

The Trudeau Institute is a free-standing, not-for-profit, basic research institute with up-to-date equipment and in-house animal production facilities. Current staff interests include: cancer immunology, transplantation immunology, immunity to infectious and parasitic diseases, regulation of immune responses, and the production and function of cytokines. Adequate funding for new projects is available from Institute resources. Salaries and benefits are competitive, and working conditions are conducive to a productive research career.

Applications consisting of a curriculum vitae, the names and addresses of three references, and a brief description of research interests, should be addressed to:

Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983

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

POSITIONS OPEN

FACULTY POSITION

Applications for a tenure-track position at the ASSISTANT PROFESSOR level in the Department of Cellular and Structural Biology, the University of Texas Health Science Center at San Antonio, for the 1993-94 academic year are invited in the area of molecular biology. The successful candidate will be expected to establish an independent research program using molecular techniques for the study of environmental health and toxicology. Also required for this position will be the development and direction of a clinical molecular genetics laboratory with an emphasis on preimplantation and prenatal diagnosis. In addition, the individual will participate in the teaching activities of the department. Preference will be given to applicants who have demonstrated the ability to obtain independent extramural funding, and who have teaching experience. *The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.* The deadline for applications is March 15, 1993. Interested individuals should send a statement of research interests and current activities, curriculum vitae, and names of three referees to: Dr. Charleen M. Moore, Department of Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78230, Telephone: (512) 567-3875, FAX: (512) 567-3803.

PLANT BIOLOGY VISITING ASSISTANT PROFESSOR

The Department of Biology, Hamilton College, invites applications for a one-year position at the assistant professor level, effective 1 July 1993. Applicants must have a Ph.D. Teaching duties will include an intermediate-level course in an area of plant sciences and team-taught courses in ecology and in general biology. Send curriculum vitae, statements of teaching and research interests, and three letters of reference to: David A. Gapp, Chair, Biology Department, Hamilton College, 198 College Hill Road, Clinton, NY 13323-1292. All application materials must be received by 1 March 1993. *Women and members of minority groups are encouraged to apply. Hamilton College is an Equal Opportunity/Affirmative Action Employer.*

NEUROSCIENTIST POSTDOCTORAL/ASSISTANT PROFESSOR

A position is available in the Physiology Section of the Medical Sciences Program on the Bloomington campus of Indiana University. Starting date is July 1, 1993. The successful candidate will participate in the teaching of basic undergraduate human physiology and/or medical neuroscience courses. A Ph.D. or equivalent degree is required and teaching experience is preferred. The initial appointment is for 1 year with the potential for annual renewal. Emphasis will be placed on quality instruction. Postdoctoral or collaborative research with regular faculty is encouraged. Submit curriculum vitae and names and telephone numbers of three references to: Dr. Roderick Suthers, Search & Screen Committee, Medical Sciences Program, Myers 203, Indiana University, Bloomington, IN 47405. Telephone: (812) 855-0616. Applications will be reviewed starting March 1, 1993 and the search will continue until the position is filled. *An Equal Opportunity/Affirmative Action Employer.*

TENURE-TRACK FACULTY POSITION IN COMPLEX SYSTEMS AND BRAIN SCIENCES at Florida Atlantic University (FAU) assigned to NIMH-sponsored multidisciplinary training program for pre- and postdoctoral fellows. Level of appointment is open. We seek an outstanding individual capable of generating extramural support wishing to research and teach in an explicitly interdisciplinary setting. The candidate will have demonstrated expertise in theoretical/computational modeling of human cognitive and brain function and be capable of relating to ongoing research at the Center. A talented experimentalist in this area may also be considered.

Please send complete curriculum vitae, representative reprints and four letters of reference by March 19, 1993 to: J.A.S. Kelso, Florida Atlantic University, Center for Complex Systems, P.O. Box 3091, Boca Raton, FL 33431. *FAU is an Equal Employment Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

INSTRUCTORS needed on fixed-term appointments in the Department of Zoology at Oregon State University (OSU) to teach and/or coordinate undergraduate and graduate courses in Ecology, Marine Biology, and Behavior for the 1993-94 academic year. A Ph.D. is required. Applicants should have teaching and doctoral-level research experience in the relevant areas. Salary commensurate with experience and responsibility. Send letter, curriculum vitae, and names, addresses and telephone numbers of two references to: **Dr. Bruce Menge, Department of Zoology, Oregon State University, 3029 Cordley Hall, Corvallis, OR 97331-2914** by 1 April 1993. *OSU is an Affirmative Action/Equal Opportunity Employer and is responsible to dual career couples.*

DEPARTMENT OF PHYSIOLOGY SCHOOL OF MEDICINE MEHARRY MEDICAL COLLEGE

A tenure-track position is available immediately in the Department of Physiology. Applications are invited for individuals with interest in the area of Neuroscience. The department has rather broad interest but would encourage applications from individuals who incorporate cellular and molecular biological approaches in their research. Candidates should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a demonstrated record of excellence in research. The successful candidate will be expected to participate fully in the department's teaching program and to develop an independent, extramurally funded research program.

The college has a strong commitment to research and offers excellent start-up funds and well-equipped facilities. Applicants are asked to provide curriculum vitae, a summary of research plans, reprints of three representative publications, and three letters of references to:

Dr. James G. Townsel
Professor and Chairperson
Department of Physiology
Meharry Medical College
1005 D. B. Todd, Jr. Boulevard
Nashville, TN 37208
Telephone: (615) 327-6288

LAKE ERIE COLLEGE OF OSTEOPATHIC MEDICINE (LECOM) BASIC SCIENCE FACULTY

LECOM, a newly established college of osteopathic medicine, invites applications for positions in the basic science disciplines of anatomy, biochemistry, microbiology, pathology, physiology and pharmacology. Candidates must have a Ph.D. and a strong commitment to teaching excellence, scholarly activity and community service. Salary and academic rank will be commensurate with credentials and experience. *Applications from women and minority candidates are strongly encouraged.* Please send curriculum vitae, a statement of interdisciplinary teaching interests and the names and telephone numbers of three references to: **JOSEPH C. GREGOREK, Ph.D., Associate Dean of Basic Sciences, Lake Erie College of Osteopathic Medicine, Millcreek Professional Building, 5451 Peach Street, Erie, PA 16509.**

TWO POSTDOCTORAL POSITIONS in Molecular and Cellular Neurobiology

Department of Biochemistry and Biophysics
School of Medicine, University of North Carolina
at Chapel Hill

Two postdoctoral positions in Molecular and Cellular Neurobiology to investigate the action of proto-oncogenes encoding tyrosine kinases and phosphatases in neuronal development. One project focuses on signal transduction by cell adhesion molecules in growth cones: protein tyrosine phosphorylation, cytoskeletal organization, calcium flux, and PI turnover (experience with video-enhanced DIC microscopy desired). Another project is to clone and analyze the function of novel tyrosine and phosphatase genes in developing brain and retina. Send curriculum vitae and names of three references to: **Dr. Patricia F. Maness, Department of Biochemistry and Biophysics, University of North Carolina School of Medicine, CB# 7260, Chapel Hill, NC 27599-7260.** *Equal Opportunity/Affirmative Action Employer.*

NEW ENGLAND BIOLABS

Molecular Biology and Biotechnology

Summer Workshop

WHEN:

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

WHERE:

Clark Science Center
Smith College
Northampton, MA

FACULTY:

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

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

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

Dr. Barton Slatko
New England Biolabs, Inc.

TO APPLY

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

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

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

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

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

INTENDED FOR BEGINNERS IN MOLECULAR BIOLOGY.

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

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

APPLICATIONS MUST BE RECEIVED BY March 1, 1993.

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



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TELEX 6817316

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS are available immediately for recent graduates with an interest in the molecular biology of clinical antitumor drug resistance. Projects involve study of regulation of genes involved in drug resistance, with an emphasis on topoisomerases and P-glycoprotein, and development of novel cellular and molecular targets for drug resistance in patients' tumors. Experience in modern molecular biology and tumor cell disaggregation methods desirable. Please send or FAX: (901-521-1668) current curriculum vitae, cover letter, and names and telephone numbers of three references to: **William T. Beck, Ph.D., Department of Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION as a member of a multidisciplinary Program Project studying the structure and function of bone related proteins, cellular and genetic regulation, and the overall organization of bone. Studies will specifically involve assessing the effects of glycosylation on osteonectin (SPARC) structure and function and its relationship to the ordered assembly of extracellular matrix proteins. Send curriculum vitae, publications list and names of three references to: **George L. Long, Ph.D., Department of Biochemistry, College of Medicine, University of Vermont, Burlington, VT 05405-0068.**

POSTDOCTORAL POSITIONS (2) are available immediately to study structure of cytochrome b558, a member of the multi-component phagocyte NADPH oxidase. NADPH oxidase generates superoxide critical for defense against infectious microbes and for pathogenesis of inflammation. Major emphasis will be placed on examining formation of NADPH oxidase *in vitro* from recombinant and purified proteins. Methods include use of monoclonal antibodies, molecular biology, and protein sequencing by Edman degradation and mass spectrometry. Applicants with an interest in protein chemistry and/or molecular biology are encouraged to send curriculum vitae and names of three references to: **Dr. Michael Kleinberg, University of Maryland School of Medicine, MSTF Room 900, 10 South Pine Street, Baltimore, MD 21201. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS IN MALARIA RESEARCH

Two postdoctoral positions are available immediately. One position is to study **Molecular Biology**, emphasizing the development of molecular markers to define clonality and strategies for transfection. The second position is to study **Molecular Pharmacology**, emphasizing the efflux mechanism of chloroquine resistance. Please send or FAX: (504-587-7313) curriculum vitae and names of three references by 5 February 1993 to: **Dr. Donald Krogstad, Tulane School of Public Health and Tropical Medicine SL-29, 1501 Canal Street, New Orleans, LA 70112. Tulane University is an Affirmative Action/Equal Opportunity Employer, and qualified women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION

Positions are currently available to examine the mechanisms of action of nerve growth factor through the cloning and characterization of genes encoding selectively regulated neural proteins, such as VGF [MCB 11:2335], and macromolecules that are involved in neurotrophin receptor signal transduction. Expertise in molecular biology and/or biochemistry is desirable. Send curriculum vitae and the names of three references to: **Dr. Stephen R. J. Salton, Fishberg Research Center in Neurobiology, Box 1065, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION available to candidates with experience in molecular biology or mouse developmental biology. Studies include the analysis of the actions of retinoic acid during embryonic development and in normal versus tumorigenic epithelial cells. Send curriculum vitae, names of three references, and a statement of research interests to: **Dr. Lorraine J. Gudas, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. An Equal Opportunity Employer/Affirmative Action/M/F/V.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Two postdoctoral positions are available, beginning July 1 and September 1, 1993, to study the use of an efficient recombination-based assay to isolate genes on human chromosomes 19 and 21. This research involves sophisticated bacterial genetics, as well as standard molecular genetic approaches. Interested applicants should send a letter of application, résumé and three letters of reference to: **Dr. David Kurnit, University of Michigan, MSRB room 3520, Ann Arbor, MI 48109-0650. An Equal Opportunity Employer.**

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

POSTDOCTORAL POSITION

Postdoctoral research position available immediately to study a family of ligand-induced transcription factors intimately involved in lipid metabolism. Background in molecular biology, with experience in nucleic acid sequencing, gel mobility shift assays, viral expression vectors, and co-transfection assays preferred. Several research avenues from which to choose. A great opportunity for an energetic and creative young scientist to identify a career niche in a dynamic topic area. Please send curriculum vitae and names of three references to: **Dr. Daniel Noonan, Department of Biochemistry, University of Kentucky, Lexington, KY 40536. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately for studies of membrane transport proteins. Of primary interest is the mitochondrial phosphate transport protein (PTP), which catalyzes proton/phosphate cotransport. This transport protein has also been suggested to act as a receptor for the import of nuclear-coded proteins into mitochondria (*Nature* (1990) 347, 424). The protein and the coupling of its H⁺ and P_i-transport pathways are being characterized with various chemical probes and with mutants (site-directed and random) generated from its gene in the yeast *S. cerevisiae* (*Biochemistry* (1991) 30, 248; *J. Biol. Chem.* (1991) 266, 19882). Various biophysical methods are also being utilized. Individuals with training in molecular biology and/or in (membrane) protein biochemistry are invited to send curriculum vitae and names of three references to: **Dr. Hartmut Wohlrab, Boston Biomedical Research Institute, Harvard Medical School, 20 Staniford Street, Boston, MA 02114. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Join integrated studies including patch clamp in retinal slices addressing signalling and neuromodulation by second messenger systems, dopamine effects, role and function of transporters at synapses, signal propagation and processing by graded potential and other nonconventional mechanisms, and modeling of retinal neural systems, utilizing image processors and other computational systems. Contact: **Frank Werblin, Neurobiology, UC Berkeley, Berkeley CA 94720; (FAX: 510-643-6791).**

POSTDOCTORAL, TECHNICIAN, AND GRADUATE POSITIONS available for molecular and genetic analysis of tomato fruit ripening. Current emphasis is on gene isolation via map-based cloning and differential screens. Highly motivated candidates should have experience with molecular techniques. Send curriculum vitae and names of referees to: **Dr. Jim Giovannoni, Department of Horticulture, Texas A&M University, College Station, TX 77843. TAMU is an Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN TOXICOLOGY

Two NIH training grant Postdoctoral Fellowships will be available in the Division of Pharmacology and Toxicology at the University of Texas at Austin. The positions must be filled by July 1, 1993. Research interests of the training program faculty include: *in vitro* and cellular toxicology; cardiovascular toxicology; non-mammalian models of drug metabolism and toxicity; oxidative stress, hypoxia, cooxidation; glutathione conjugate mediated nephrotoxicity and nephrocarcinogenicity; nutrition and the immune system in carcinogenesis; quinone thioether mediated toxicities; and neurotoxicology. *Applicants should be U.S. citizens or permanent residents.* Please submit curriculum vitae and arrange for three letters of reference to be forwarded to: **Dr. Terrence J. Monks, Toxicology Program, Division of Pharmacology and Toxicology, College of Pharmacy, University of Texas at Austin, Austin, TX 78712. An Equal Opportunity Employer.**

BIOCHEMICAL GERONTOLOGIST RESEARCH FELLOW

Interdisciplinary Studies in Aging and Cancer

We are a state-of-the-art cancer research institute, located on the campus of the New York Medical College in lower Westchester. We have an exciting career opportunity for a devoted professional with a Ph.D. in biochemistry or related field. You will apply your basic training to both laboratory and human studies aimed at elucidating the mechanisms of the biological aging process and identifying the relationships between aging and diseases such as cancer. Of particular interest is the role of nutrition and antioxidants in regulating the aging process and longevity. This position offers an excellent opportunity for advancement as well as independence.

We offer a competitive salary and an excellent benefits package. For confidential consideration, send curriculum vitae to: **Department JR, American Health Foundation, One Dana Road, Valhalla, NY 10595. We are an Equal Opportunity Employer, M/F/H/V.**

AMERICAN HEALTH FOUNDATION

POSTDOCTORAL RESEARCH FELLOW. A postdoctoral position is available immediately in a group developing and performing transposon-based mapping and sequencing technologies. The Wilms' Tumor-Aniridia gene cluster on human chromosome 11p13 is being used as a model target system. Work will involve P1 cloning of this region and insertion of transposons into P1 clones for use in subsequent DNA sequencing. Applicant will be a member of an independent department at Applied Biosystems, Inc., which is dedicated solely to genome research, but will have the opportunity to train in an environment dedicated to technology development as well as to providing access to state-of-the-art DNA mapping and sequencing automation. Qualifications include: Ph.D. with a strong background in Molecular Biology and genetics. Send curriculum vitae, a brief research summary and three references to: **Elise Rose, Ph.D., Advanced Center for Genome Research, Applied Biosystems, Inc., 850 Lincoln Centre Drive, Foster City, CA 94404. Equal Opportunity Employer.**

POSTDOCTORAL FELLOW. The Department of Medicine has an opening for a postdoctoral fellow to study the immunopathogenesis of human rheumatoid arthritis. The successful applicant will determine the characteristics of a novel antigen expressed mainly on diseased endothelium. The applicant will also investigate the role of angiogenic (*Science* 258:1798, 1992) and other cytokines in rheumatoid arthritis. Requirements include a Ph.D. and/or M.D. with a strong background in molecular biology (mammalian mRNA analysis, expression cloning), immunology (Western blotting, immunoprecipitation) and authorship skills. Send curriculum vitae to: **Dr. Alisa Koch, Northwestern University Medical School, 303 East Chicago Avenue, Ward Building 3-315, Chicago, IL 60611. Northwestern University is an Equal Opportunity Employer.**

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UNIVERSITY OF SUSSEX



PROFESSOR OF ENVIRONMENTAL SCIENCE

In 1974 the School of Chemistry and Molecular Sciences in the University of Sussex initiated an undergraduate Major in Environmental Science in which strong emphasis is given to the fundamental science of natural phenomena.

This rapidly growing area is to be strengthened by a Chair appointment in some branch of chemistry applied to the environment. The successful candidate will be expected to lead a research group in Chemistry of the Environment and to provide leadership for the further development of Environmental Science within the University.

Suitable topics might be *soil chemistry, sedimental chemistry, chemistry of aquatic systems, chemical ecology, agrochemistry, organic or inorganic geochemistry, atmospheric chemistry*. This list is meant only as a guide and researchers in other fields meeting the above criteria are also invited to apply.

The School is exceptionally well equipped. There is a lively and stimulating research atmosphere and a growing Environmental Science student body.

Prospects for the right individual to develop a strong research presence are very good with excellent opportunities to interact with colleagues within the School of Chemistry and Molecular Sciences and those in other Schools.

Further particulars and an application form may be obtained from Ms. V. Noble, Personnel Office, University of Sussex, Falmer, Brighton BN1 9RH. Potential applicants are encouraged to contact the Dean, **Dr. J. D. Smith, or Dr. A. Hudson**, telephone (0273) 606755, to discuss this further. The closing date for receipt of completed applications is 31 March 1993.

MOLECULAR IMMUNOLOGISTS/ CELL BIOLOGISTS

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

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



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CELLULAR NEUROBIOLOGY, including studies of transmitters and receptors, synaptic physiology, channels, and cellular transduction.

NEURAL SYSTEMS RESEARCH, including studies of perception, behavior and cognitive function, with approaches including anatomy, pharmacology, physiology, psychophysics and applied mathematics.

Appointments of independent laboratory heads will be made at the non-tenured assistant and associate professorial levels, as well as at the level of tenured full professors.

Applicants should send their C.V. and a description of their research interests to:



**Neuroscience Search Chair
Rockefeller University
Box 80, 1230 York Avenue
New York, NY 10021**

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April 4 - 6, 1993

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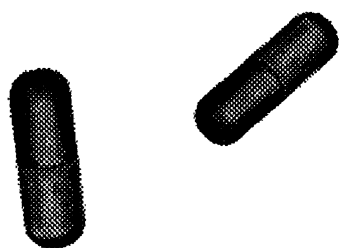
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**Registration
and
Abstract Deadline
March 1st., 1993**

Contact

Dr. Luisa L. Villa or Libeca M. Ward
Instituto Ludwig de Pesquisa sobre o Câncer
r. Prof. Antonio Prudente #109, 4th floor
CEP 01509-010
Phone: (011)270-4922 Fax: (011)270-7001
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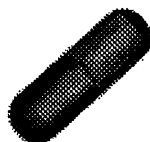
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UNIVERSITY OF WINDSOR HEAD, DEPARTMENT OF BIOLOGICAL SCIENCES

Applications and nominations are invited from outstanding individuals for the position of Department Head to begin July 1, 1993 (starting date negotiable). The applicant must have an active research program in either Environmental/Population Biology or Molecular/Developmental Biology. The Department has 21 faculty, 4 adjunct professors, 30 graduate students, and an ongoing program of visiting scholars and scientists, and post-doctoral fellows. The Department offers Doctoral and Master's programs with specialization in Environmental/Population and Molecular/Developmental Biology. The undergraduate B.Sc. program serves more than 450 majors in Biological Sciences.

In addition to a strong record of research and graduate training, the applicant should have a commitment to undergraduate teaching as well as the capacity to provide leadership and administrative competence appropriate to the position.

The University of Windsor is committed to employment equity and welcomes applications from Aboriginal Peoples, persons with disabilities and members of visible minorities. Applications from women are particularly encouraged. In accordance with Canadian Immigration requirements this advertisement is directed, in the first instance, to Canadian citizens and permanent residents of Canada.

Consideration of applications will begin March 1, 1993. Applications and nominations, including a curriculum vitae and the names of three referees, should be sent to:

Dr. Robert T. M'Closkey
Chair, Head Search Committee
Department of Biological Sciences
University of Windsor, Windsor, Ontario, N9B 3P4

Oregon State University Thomas Hart and Mary Jones Hornig Professorship in the Humanities

The estate of the late Dr. Benjamin Hornig has established an endowment fund at Oregon State University for the purpose of creating a Professorship in the Humanities. Dr. Hornig's intent was to improve and extend the teaching of humanities to students in the sciences and technical areas offered by Oregon State University. In keeping with Dr. Hornig's wishes, the university has created an endowed chair to be filled by a distinguished senior scholar whose teaching and research interests bridge the humanities and sciences. Appointment to the chair will carry tenure and a position in one of the university's academic departments, or a joint appointment in more than one department. The endowment will also support a related general education program, which may include activities such as a lecture series, visiting scholars, and course development.

Oregon State University invites nominations and applications for appointment to the Hornig chair. Selection will be based on the candidate's outstanding credentials in teaching and scholarship. Nominations and applications should be sent to the chair of the Hornig Search committee: Paul Farber, Department of History, Milam Hall 306, Oregon State University, Corvallis, OR 97331-5104.

Nominations and applications should consist of a letter of interest, a vitae, and the names and addresses of three to five references. (References will not be contacted until the Hornig Search Committee has confirmed interest from the nominee.) Applications and nominations will be accepted until the position is filled.

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Vanderbilt University School of Medicine is seeking candidates for the Chair of the Department of Obstetrics and Gynecology. The Medical Center is situated on the campus of Vanderbilt University in Nashville, Tennessee. The School has seen significant and continuing growth over the past decade in its service, teaching, and research activities. The Department of Obstetrics and Gynecology has been an integral component of that growth and is presently a strong and energetic Department. Of note, inter-Departmental collaboration in all three facets of academic medicine is a fact of life at Vanderbilt. Nominations and applications should be sent to:

Ian M. Burr, M.D., Professor and Chair,
Department of Pediatrics,
Chair, Obstetrics and Gynecology Search
Committee, AA-0216 Medical Center N.
Nashville, TN 37232-2574

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POSITIONS OPEN

ASSISTANT PROFESSORS: Tenure-track beginning fall 1993. Ph.D. required. (1) **ECOLOGIST** with a research specialty in some aspect of plant ecology who will teach general biology and graduate-level plant ecology, biometrics, and biosystematics and evolution. (2) **PHYSIOLOGIST** with a research specialty in some aspect of animal physiology who will teach general biology, anatomy-physiology and senior/graduate-level animal physiology. Successful candidates for both positions will direct M.S. candidates in their research. Availability of positions contingent upon funding. Deadline for applications: March 15, 1993. Send transcripts, curriculum vitae, publications, statement of teaching/research interests and three reference letters to: **Dr. L. M. O'Flaherty, Chair of Biological Sciences, Western Illinois University, Macomb, IL 61455.** *Western Illinois University is an Affirmative Action/Equal Opportunity Employer and has a strong institutional commitment to diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people including minorities, women and persons with disabilities.*

TENURE-TRACK POSITION IN MOLECULAR AND CELLULAR BIOLOGY

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

POSTDOCTORAL POSITION

Studies of Hematopoietic Reconstitution Therapy Using Embryo Derived Precursor Hematopoietic Stem Cells

Postdoctoral position immediately available, funded by an NIH AIDS Program Grant, to study a mouse model system for targeted gene therapy of lymphotropic retroviral infection. This project will utilize an embryo-derived, hematopoietic stem cell system as an alternative to bone marrow stem cells for the delivery of therapeutic genes. Salary range: \$22,000 to \$30,000. Interested individuals may send curriculum vitae and the names of at least two references to: **Dr. Thomas E. Wagner, Edison Center, Ohio University, Athens, OH 45701.** *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE, full-time: Research in perinatal molecular neuronal biochemistry and neuronal cell culture. Conduct biochemical assay for neurons. Purify and analyze RNA, DNA and proteins. Prepare research reports for publications. Requirements: M.S. in Biology. Knowledge and/or ability in cell culture, molecular and biochemistry techniques including electrophoresis, chromatography and tissue culture. Computer software including Sigma Plot41, Eight-in-one and Microsoft Word. Salary: \$26,900 per year. Job/Interview Site: Loma Linda, California. Send this ad and résumé to: **Job# PM10670, P.O. Box 269065, Sacramento, CA 95826-9065** no later than February 2, 1993.

ORNITHOLOGIST. The Cornell Laboratory of Ornithology invites applications for a **CHIEF SCIENTIST** position to direct all scientific aspects of Project FeederWatch and the National Science Experiments. This is a two-year position with the possibility of extension. Consideration will be given to a one-year sabbatical. Responsibilities include providing ornithological guidance including supervision of data analysis and creation of new experiments for several fully funded projects plus the supervision of 3 to 4 support staff. Salary commensurate with qualifications and experience. Full Cornell University benefits. Position available spring 1993. To apply send curriculum vitae and names and telephone numbers of three references to: **Dr. Charles Walcott, Executive Director, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850-1999.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS (2). Available immediately to work on elicitor receptors and signal transduction in plant cell membranes (see *Plant Physiol.* 99:1208). One post requires experience in signalling mechanisms/receptors (in plants or animals) ideally with some experience in protein purification; the second, experience in plant molecular biology with interest in host-parasite interactions. Send curriculum vitae and names of three referees (with telephone/FAX number) to: **V. J. Higgins/E. B. Blumwald, Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Canada M5S 3B2. (FAX: 416-978-5878).**

POSTDOCTORAL POSITION: A position is available immediately for a recent Ph.D. to investigate the molecular biology of the MAL-activator, a transcription activator regulating expression of the maltose fermentation enzymes in *Saccharomyces cerevisiae*. Demonstrated experience in molecular genetics/recombinant DNA, protein biochemistry and/or immunological techniques desired. Send résumé to: **Dr. Corinne A. Michels, Department of Biology, Queens College of CUNY, 65-30 Kissena Boulevard, Flushing, NY 11367, USA.**

POSTDOCTORAL POSITION available to study physiological aspects of neuronal death *in vitro*. The laboratory is examining both vertebrate (songbird forebrain) and invertebrate (*C. Elegans*) preparations of natural neuronal death. Please send or FAX curriculum vitae and names and addresses of three references to: **Director, Laboratory of Neuronal Plasticity, Department of Neurology and Neuroscience, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. FAX: (212) 746-8532.**

POSTDOCTORAL POSITION available June 1, 1993 for U.S. citizen or permanent resident to study expression and regulation of arachidonate-metabolizing enzymes in lung cells. Ph.D. degree and experience in cell culture, biochemical techniques, and molecular biology required. Send curriculum vitae, letter of intent, and names of 3 references to: **Dr. Marc Peters-Golden, Pulmonary Division, 3916 Taubman Center, University of Michigan, Ann Arbor, MI 48109-0360. FAX: (313) 764-4556.**

POSTDOCTORAL POSITIONS (3) in Applied Ecology (Available beginning summer 1993; Initial appointments are for one year but with the possibility of renewal for a second year). Collaborative research in areas of arthropod predator/prey interactions (w/Ann.L. Rypstra), aquatic toxicology and hazard assessment (w/James T. Oris), and insect cold-hardiness/ice-nucleating bacteria (w/Richard E. Lee). Review of applications will begin on 1 April 1993 and continue until the positions are filled. Send letter of application with statement of research interests and curriculum vitae, and have three letters of reference and copies of academic transcripts sent to: **Dr. Douglas H. Taylor, Chair, Department of Zoology, Miami University, Oxford, OH 45056.** *Miami University is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study the regulation and function of *hsp* genes in *Pseudomonas syringae*. Ph.D. and prior experience in prokaryotic molecular genetics is required. Send curriculum vitae, reprints and names of three references to: **Dr. Steven Hutcheson, Department of Botany, University of Maryland, College Park, MD 20742. FAX: 301-317-9082; E-mail: sh53@umail.umd.edu.** *An Affirmative Action/Equal Opportunity Employer.*

FELLOWSHIP IN VISION SCIENCE

PREDOCTORAL AND POSTDOCTORAL RESEARCH FELLOWSHIPS are available at the University of Florida College of Medicine through an NIH, National Eye Institute Training Grant. Research emphases are in vision cell biology, molecular biology, and biochemistry. The 12 faculty preceptors maintain primary appointments in the Departments of Anatomy and Cell Biology, Biochemistry and Molecular Biology, Immunology and Medical Microbiology, Neuroscience, Pathology, and Pharmacology. Inquiries for complete program description and application forms should be sent to: **Dr. William Hauswirth, Box 100284, University of Florida, Gainesville, FL 32610-0284.** Applications will be accepted at any time, but decisions are normally made in April/May for August admission. *U.S. Citizens only. Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITIONS available in avian herpesvirology. Opportunities include studies on viral gene function in the natural host, immunological responses to viral infections, and development/characterization of live recombinant avian viral vaccines. Experience in molecular biology or immunology desired. Send curriculum vitae and three letters of reference to: **Dr. Robin Morgan or Dr. Calvin Keeler, Department of Animal Science and Agricultural Biochemistry, 040 Townsend Hall, University of Delaware, Newark, DE 19717-1303.** *The University of Delaware is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study the function and regulation of matrix metalloproteinases and their inhibitors in embryonic morphogenesis and tumor metastasis. Applicants with a strong background in cell or molecular biology and protein biochemistry preferred. Please send curriculum vitae, statement of research interests, and three references to: **Dr. J.-M. Chen, Department of Anatomy and Developmental Biology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. Telephone: (215) 955-5561. Fax: (215) 923-3808.**

POSTDOCTORAL FELLOWSHIP at the University of Rochester, to study molecular basis of muscle atrophy associated with aging. Requires experience with molecular biology techniques. Send curriculum vitae to: **Stephen Welle, Ph.D., Monroe Community Hospital, Endocrine Unit, 435 East Henrietta Road, Rochester, NY 14620.** *The University of Rochester is an Equal Opportunity Employer.*

NIMH (NEUROSCIENCES RESEARCH BRANCH) NATIONAL TRAINING PROGRAM IN COMPLEX SYSTEMS AND BRAIN SCIENCES AT FAU: PRE- AND POSTDOCTORAL FELLOWSHIPS. Highly qualified individuals with undergraduate degrees in a pertinent discipline are invited to apply for this 5-year training program leading to the Ph.D. degree in Complex Systems and Brain Sciences. The aim of the Program is to blend theoretical concepts and mathematical tools for complex systems with specific experimental work in the behavioral and brain sciences.

Graduate training will consist of a core curriculum in the mathematics of non-linear dynamical systems, neuroscience (including neural networks and cognitive science), and computational science. Postdoctoral candidates should have a strong interdisciplinary interest.

Active research areas include: sensorimotor control, coordination and learning; human brain imaging; brainstem mechanisms of behavior; neural growth and development; speech production and perception; neurolinguistics; visual perception; mathematics of complex systems; nonlinear dynamics, neural networks and robotics.

Prospective fellows should send letter of application, GRE scores (graduate fellows only), curriculum vitae and 3 letters of reference to: **Dr. Robert Vertes, Associate Director, Program in Complex Systems and Brain Sciences, Center for Complex Systems, Florida Atlantic University, P.O. Box 3091, Boca Raton, FL 33431.** *FAU is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE Available March 1993 to study effects of stress and noradrenergic system on immediate early gene expression in the brain and functional significance of c-fos for adaptation and depression. Candidates must have basic techniques of molecular biology. Familiarity with neuroscience preferred. Salary: \$25,000. Please send curriculum vitae and description of research background to: **Dr. Eric Stone, Department of Psychiatry, TH HN510, New York University Medical Center, 550 First Avenue, New York, NY 10016. Telephone: 212-263-5740.**

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- Cell Biochemistry in a Fish Model (Neal Cornell)
- Development of Mariculture Methods (Alan Kuzirian)
- Database Development of *E. coli* Genes and Gene Products (Monica Riley)
- Biochemistry of Bioluminescence (Osamu Shimomura)
- National Vibrating Probe Facility (Lionel Jaffe & Peter Smith)
- Calcium Imaging in Living Cells Using the Aequorin Method (Andrew Miller & Lionel Jaffe)

Submit a letter of interest and current curriculum vitae to be received by
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Applications received by February 15, 1993 will be assured of consideration. However, applications will be considered until the positions are filled.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity employer. Please send TWO (2) sets of resume information for each position you are applying. Indicate in your correspondence the JOB #, and the names, addresses and telephone numbers of three references to:

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Plant Breeding Division
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WOMEN IN SCIENCE

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(CHIEF EXECUTIVE OFFICER)

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Qualified candidates should hold a degree at the doctoral level, should have a strong background and interest in scientific research, should be experienced in management, negotiation and budgeting, should possess strong interpersonal and communication skills, and should be willing to travel. Salary and benefits are competitive and will be commensurate with experience and responsibilities.

To apply, please forward a curriculum vitae, and a list of references to:

**The Search Committee
Gordon Research Center
University of Rhode Island
Kingston, RI 02881-0801
FAX: 401-783-7644**

A position description can be obtained by writing to the above address. Review of applications will begin around February 1st, 1993, and will continue until the position is filled. Gordon Research Conferences, Inc. is an equal opportunity, affirmative-action employer.



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POSITIONS OPEN

POSTDOCTORAL POSITION in gene expression to study cis-acting transcriptional regulation of *Drosophila* muscle genes in transgenic flies (see *Mol. Cell. Biol.* 11, 1901 (1991)) and isolation of transcription factors regulating early and late muscle gene expression. Position is available immediately. Applicants must have a Ph.D., and experience in recombinant DNA methods is desirable. Send curriculum vitae and names of three references to: **Dr. Robert V. Storti, Department of Biochemistry (MC/536), University of Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612.** *UTC is an Affirmative Action/Equal Opportunity Employer.*

TRAINING IN VIRAL MOLECULAR BIOLOGY AND IMMUNOLOGY

St. Jude Children's Research Hospital, a premier center for basic biomedical research in catastrophic diseases of children, invites applications for **POSTDOCTORAL FELLOWSHIPS**. Fellowships are available to recent Ph.D. or M.D./Ph.D. graduates who wish to gain training and experience in **Molecular Virology**, Chairman, Dr. Robert G. Webster; **Immunology**, Chairman, Dr. Peter Doherty; and **Infectious Diseases**, Chairman, Dr. Walter Hughes. These fellowships are awarded for up to three years and are based on merit, recommendations and promise of a productive career in basic research. Two positions are immediately available. Interested candidates should send curriculum vitae and the names of three references to: **Robert G. Webster, Ph.D., Chairman, Department of Virology & Molecular Biology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, TN 38101-0318, Telephone: 901/522-0400, FAX: 901/523-2622.**

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POSTDOCTORAL FELLOW in the Division of Pediatric Endocrinology at the University of North Carolina at Chapel Hill to conduct research into mechanisms of insulin-like growth factor action in transgenic mice. Position requires a Ph.D. with a strong background in molecular biology. Send curriculum vitae, cover letter, and names of three references to: **Dr. A. Joseph D'Ercole, Department of Pediatrics, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7220.**

MOLECULAR MECHANISMS OF BIRTH DEFECTS POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Position available to investigate molecular and cellular mechanisms of birth defects. Studies include analysis of cellular signal transduction mechanisms. Particular emphasis directed toward clarification of interactions among growth factors, protein kinases and transcription factors in regulating gene expression and cell differentiation during normal and abnormal mammalian embryonic development. Strong background in biochemistry, cell and/or developmental biology required; expertise in molecular methodologies recommended. Inquiries may be sent to: **Dr. Robert M. Greene, Molecular Determinants of Birth Defects Training Program, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107.** *We are committed to a smoke-free environment. Equal Opportunity Employer.*

ASSISTANT RESEARCH MICROBIOLOGIST POSITION available immediately in laboratory using molecular biological techniques to investigate the role of human papillomavirus and chemical carcinogens in oral carcinogenesis. Send curriculum vitae to: **Dr. N.-H. Park, University of California School of Dentistry, Los Angeles, CA 90024.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH POSITION. Available immediately in the area of signal transduction in exocrine pancreas. For background see Saluja et al *JBC* 267:11202 (1992). NIH funding for at least 3 years. Please send curriculum vitae to: **Dr. M. Steer or A. Saluja, Department of Surgery, Beth Israel Hospital, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION

Available immediately to participate in a study of the effects of landscape ecology on population characteristics and dispersal of vertebrates. A doctoral degree in zoology or ecology is required. Applicants should have field experience with reptiles and be familiar with computer programming and modeling of populations. Salary is \$28,500 for one year with the possibility of being renewed for up to three years. *Applicants must be of United States citizenship.* Applications should be received by March 1, 1993. Send curriculum vitae, the names of three references and a one-page statement of research experience to:

**Dr. Justin D. Congdon
Savannah River Ecology Laboratory
Drawer E
Aiken, SC 29802
USA**

The Savannah River Ecology Laboratory is an Affirmative Action/Equal Opportunity Employer.

TWO POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS, available immediately in NIH-funded lab to study: protein glycosylation, prenylation, and trafficking; membrane assembly and turnover; lipid biosynthesis and intracellular transport. Strong background in protein and/or lipid biochemistry essential. Send curriculum vitae, reprints, and name/telephone number of three references to: **Dr. Steven J. Fliesler, The Eye Institute, St. Louis University School of Medicine, St. Louis, MO 63110.** *An Affirmative Action/Equal Opportunity Employer.*

TWO POSTDOCTORAL RESEARCH ASSOCIATE positions are available to study opioids. (1) Prior experience in neuropharmacology to examine mechanisms of opioid tolerance in animals; (2) prior experience in molecular biology to examine the regulation of opioid peptide gene expression. NIH-supported training—U.S. citizen or permanent resident. Contact: **Dr. Charles E. Inturrisi, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS

POSTDOCTORAL RESEARCH ASSOCIATE positions available immediately to study oxidative damage, repair and mutagenesis. One position is to utilize recombinant antibody technology to measure DNA damage in cells. Interdisciplinary, interactive group at the University of Vermont's Markey Center for Molecular Genetics. Send curriculum vitae and list of references to: **Dr. Susan Wallace, The University of Vermont, Department of Microbiology and Molecular Genetics, Stafford Hall, Burlington, VT 05405.** *An Equal Opportunity/Affirmative Action Employer.*

APPLIED ECOLOGIST FLORIDA INTERNATIONAL UNIVERSITY (FIU)

The Environmental Studies Program seeks to hire a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** with a Ph.D. and postdoctoral training in restoration/landscape/agriculture ecology or conservation biology. Teaching at undergraduate/graduate levels. Collaborative research opportunities with graduate programs in Biology, Landscape Architecture and Environmental Education. Send application, postmarked by February 15, 1993 to: **Dr. David Lee, Applied Ecologist Search Committee, Environmental Studies Program, Florida International University, Miami, FL 33199 (VOICE: 305-348-3111; FAX: 305-348-3772; Email: LEED@SERVAX).** *FIU is a member of the State University System of Florida with 23,000 students and is an Affirmative Action/Equal Opportunity Employer.*

Large medical venture capital firm seeks experienced **SCIENTIST OR PHYSICIAN** for full-time position. One or two years of research experience after training preferable. Self-reliance and strong communication skills are essential. Attractive compensation including both salary and equity position in companies you build. Please send curriculum vitae to: **Ms. Chris McEwen, Medical Venture Partners, 375 Park Avenue, Suite 1501, New York, NY 10152.**

POSITIONS OPEN

RESEARCH ASSOCIATE

A position is available for an outstanding scientist with Ph.D. in Biochemistry, Nutrition, or Toxicology and appropriate postdoctoral training. Major thrust of research will be on the effects of dietary factors on xenobiotic metabolism and carcinogenesis. Previous experience in these areas is highly desirable. Please send curriculum vitae, summary of current research activities, and selected reprints to: **Dr. Chung S. Yang, Laboratory for Cancer Research, College of Pharmacy, Rutgers University, Piscataway, NJ 08854.** *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH CHEMIST (Tenure-track)

A major State public health laboratory affiliated with a graduate school of public health is seeking a highly qualified scientist to (1) conduct independent research in an important area of nuclear, environmental or geochemistry, and (2) supervise the radiochemistry laboratory engaged in the routine monitoring of environmental radioactivity. The laboratory is fully equipped with modern state-of-the-art instrumentation. Other staff members are active in research in atmospheric chemistry and physics of SO₂, NO₂, and selected organic molecules, radioactive and non-radioactive tracers, indoor radon, applications of fractal theory to nuclear problems, and air pollution source characterization and atmospheric tracer modeling. The successful candidate is expected to show promise of developing an independent, externally funded, original and well-recognized research program. A Ph.D. degree is required. A joint appointment with the School of Public Health, State University of New York at Albany is expected. Excellent fringe benefits. In addition to submitting a statement of research interests, curriculum vitae, and publication lists, all candidates should arrange for three letters of reference to be submitted to: **Dr. L. Husain, Wadsworth Center for Laboratories and Research, New York State Department of Health, Empire State Plaza, P.O. Box 509, Albany, NY 12201-0509.** *An Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL TOXICOLOGIST

The Department of Biology at Memphis State University invites applications for a tenure-track position in environmental toxicology. Candidates must have a Ph.D. in the biological sciences and strong analytical abilities. Postdoctoral research experience in environmental toxicology is desirable. The successful candidate will be expected to establish an extramurally funded research program and provide excellent teaching to undergraduate and graduate students. Salary and rank are commensurate with experience.

The Department has 30 faculty and awards the M.S. and Ph.D. State-of-the-art equipment for environmental contaminant identification and toxicity bioassay development and the 623-acre Meeman Biological Station are available. Research opportunities also exist at the Agri-center International.

Curriculum vitae, current and future research plans, a maximum of five representative publications, and names and addresses of five references should be sent to: **Dr. Melvin Beck, Chairman, Search Committee, Department of Biology, Memphis State University, Memphis, TN 38152.** Evaluation of applications will begin 15 March 1993 and continue until the position is filled. *Successful candidates must meet Immigration Reform Act criteria.*

Memphis State University is an Equal Opportunity/Affirmative Action Employer committed to education of a non-racially-identifiable student body.

Research department specializing in cryopreservation of tissue for transplantation seeks qualified applicants: **POSTDOCTORAL** and/or **RESEARCH ASSOCIATE** with 0-2 years of postdoctoral experience. Requires a Ph.D. in biological discipline with a preference for experience in vascular physiology. **SENIOR RESEARCH SCIENTIST** with at least 5 years of postdoctoral research experience. Requires a doctorate in a medical or biological discipline with experience in *in vitro* cellular immunology. Applicants should send curriculum vitae, a description of research interests and reprints of representative publications to: **RM, Research Department, CryoLife, Inc., 2211 New Market Parkway Suite 142, Marietta, GA 30067.**

CAREERS IN SCIENCE: A LOOK AT THE FUTURE

SCIENCE 18 September Reprint

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

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IMMUNOLOGY AND NEUROBIOLOGY GEORGIA STATE UNIVERSITY

The Department of Biology invites applications for two tenure-track positions. Appointments are expected to be made at the level of Assistant Professor; however, appointments at a higher rank will be considered for candidates with appropriate credentials. Appointments will start in September, 1993.

Immunologist: Research interests in cellular and/or genetic approaches, with emphasis on cell-cell interactions, cytokines or lymphokines.

Neurobiologist: Research interests emphasizing cellular, molecular and/or genetic approaches in any one of the following areas: motor systems, functional anatomy or inter- and intracellular communication.

Responsibilities include participation in teaching and research in undergraduate, M.S. and Ph.D. programs. Applicants must have demonstrated research potential through postdoctoral experience and publication record. The salary will be commensurate with experience. Applications, including *curriculum vitae*, reprints, a statement of research plans and three letters of reference should be sent to **Chair, Department of Biology, Georgia State University, P.O. Box 4010, Atlanta, Georgia 30302-4010**. Deadline for receipt of application is 15 February, 1993. *Georgia State University, a unit of the University System of Georgia, is an Equal Opportunity/Educational Institution and an Equal Opportunity/Affirmative Action Employer.*

RESEARCH SCIENTISTS

Agouron Pharmaceuticals, Inc., a recognized pioneer and leader in rational drug design, is seeking talented Ph.D. scientists with up to five years postdoctoral experience to join its pharmacology group. Individuals enthusiastic about becoming a part of our multidisciplinary team will find immediate openings in the following areas:

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POSTDOCTORAL RESEARCH ASSOCIATE HORMONAL SIGNALING IN YEAST

Position available to study the molecular basis of insulin induced responses in yeast. (For background, see Lenard, Trends in Biochemical Sciences, 17, 147, 1992). A combination of genetic, biochemical and molecular approaches will be used. Prior experience in yeast genetics or molecular biology would be advantageous. Please send CV with names of references to: **John Lenard, Ph.D., Department of Physiology and Biophysics, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635**. UMDNJ, New Jersey's university of the health sciences is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.

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POSITIONS OPEN

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS (JILA)

JILA is operated jointly by the National Institute of Standards and Technology (formerly NBS) and the University of Colorado, and is devoted to research and teaching in atomic and molecular physics, chemical physics, laser physics, quantum and nonlinear optics, astrophysics, precision and fundamental measurements, gravitational physics, geophysical measurements, and related areas. The Institute expects to have one or more career-track scientific positions available at the entry level within the next several years. New scientists will be expected to develop an independent and broad-based experimental or theoretical program of basic research in an area related to JILA interests and to participate in the faculty and teaching activities of one of the affiliated departments (Physics, Chemistry and Biochemistry, and Astrophysical, Planetary, and Atmospheric Sciences). *We are particularly interested in receiving applications from women and ethnic minorities.* Interested parties should send a curriculum vitae, a brief summary of research interests, and the names of three persons willing to act as references to: **Chairman, JILA, University of Colorado, Boulder, CO 80309-0440.**

The University of Colorado is an Equal Employment/Affirmative Action Employer located in Boulder, Colorado.

BIostatistician. To provide information for R&D projects and programs in support of new product development, domestic and international regulatory submissions and in maintenance and growth of existing products by performing statistical analyses and writing statistical summaries of data generated throughout R&D. Position requires a Ph.D. (entry-level) in Biostatistics and 2 years of experience in research activities with statistical analyses and writing statistical summaries of data gained through doctoral school work. An M.S. degree in Biomedical area is a plus. Salary: \$43,320 per year, 40 hours per week. Place of employment and interview: Irvine, California. Send this ad and résumé to: **Job# JL33218, P.O. Box 269065, Sacramento, CA 95826-9065, no later than February 2, 1993.**

COMPUTER SCIENTIST. Research AI approaches for model-based diagnosis; research issues of modeling different levels of approximations and abstractions; develop qualitative and numerical simulation engines; develop advanced knowledge representation and reasoning techniques; develop fault detection, isolation and recovery systems. Ph.D. in Computer Science plus knowledge in AI, model-based reasoning techniques, representation and reasoning techniques for reasoning about physical systems, programming in LISP, writing large LISP-based systems. Salary: \$5000 per month. Job site/interview: Moffett Field, California. Send ad with résumé to: **#MLM #15559, P.O. Box 269065, Sacramento, CA 95826-9065 no later than February 14, 1993.**

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

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POSITIONS OPEN

RESEARCHER

R5, Position number 86064. Hawaii Natural Energy Institute, School of Ocean and Earth Science and Technology, University of Hawaii, 11-month appointment, temporary, full-time, non-tenure-track position, state funds, to begin approximately March 1, 1993. **DUTIES:** Conducts research and manages program in seabed mining engineering technology. Writes and prepares research proposals and secures extramural funding. Designs experimental research programs. Instructs courses in seabed mining and processing. Supervises graduate assistants and monitors thesis topics. **MINIMUM QUALIFICATIONS:** Ph.D. in oceanography, mining engineering or related field. Ten years of professional experience in marine mining research and development. Considerable knowledge of seabed minerals, mining, and processing. Demonstrated experience with funding agencies and congressional process. **MINIMUM SALARY:** \$92,340 per year. Inquiries: **Dr. Patrick Takahashi, Telephone: (808) 956-8346.** To apply, send a statement of research and teaching interests, curriculum vitae and three letters of recommendation to: **Personnel Officer, Hawaii Natural Energy Institute, University of Hawaii, 2540 Dole Street, Holmes 246, Honolulu, HI 96822.** Closing date: February 17, 1993. *The University of Hawaii is an Equal Opportunity/Affirmative Action Institution and encourages women, minorities, handicapped, and veterans to apply.*

ASSOCIATE SCIENTIST-SENIOR SCIENTIST, METABOLISM. Our client, an innovative San Francisco Bay Area pharmaceutical/natural products company, has immediate need for a scientist to develop and validate metabolite assays and conduct metabolism studies for drugs under development at the company. The desirable candidate will have four or more years of industrial experience in metabolism work for drug development, strong grounding in analytical methods for isolating and identifying drug substances and metabolites from urine and blood samples, and an advanced degree (M.S. or higher) in biochemistry, chemistry or a related field. Qualified candidates should submit résumé and cover letter by February 10, 1993 to: **Jürgen Weber, Ph.D., BioQuest, 100 Spear Street, Suite 1125, San Francisco, CA 94105-1522.** Our client is an *Equal Opportunity Employer. Women and minorities are encouraged to apply.*

ANNOUNCEMENTS

THE ROLE OF TOXICOLOGIC PATHOLOGY IN SAFETY ASSESSMENT

A Symposium Hosted by the
National Academy of Sciences
Board on Environmental Studies & Toxicology
Committee on Toxicology
February 9 & 10, 1993
Washington, D.C.

Pathologists, toxicologists, and individuals working with regulatory agencies will be especially interested in this symposium.

To receive registration information, contact:

**Sharon Holzmann (NAS-359)
National Academy of Sciences
2101 Constitution Avenue N.W.
Washington, D.C. 20418
Telephone: 202-334-1553; FAX: 202-334-1639**

COURSES AND TRAINING

GENETICS SHORT COURSE 19-30 July 1993

34th Annual Short Course in Medical & Experimental Mammalian Genetics. Conducted by Johns Hopkins University and the Jackson Laboratory at Bar Harbor, Maine. Morning and evening lectures covering the field are supplemented by workshops, tutorials, and demonstrations. Inquiries, applications to: **E.H. Birkenmeier, M.D., c/o Training & Education Office, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609; or V.A. McKusick, M.D., 1007 Blalock, Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21205.**

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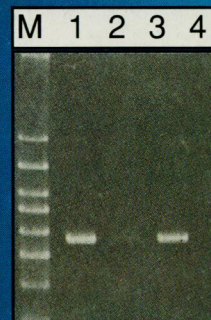
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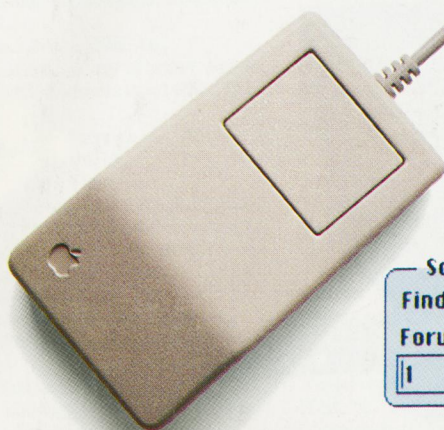
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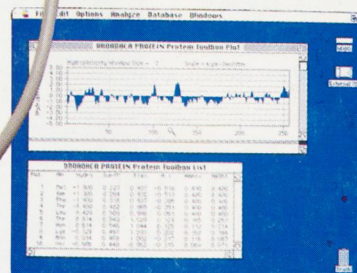
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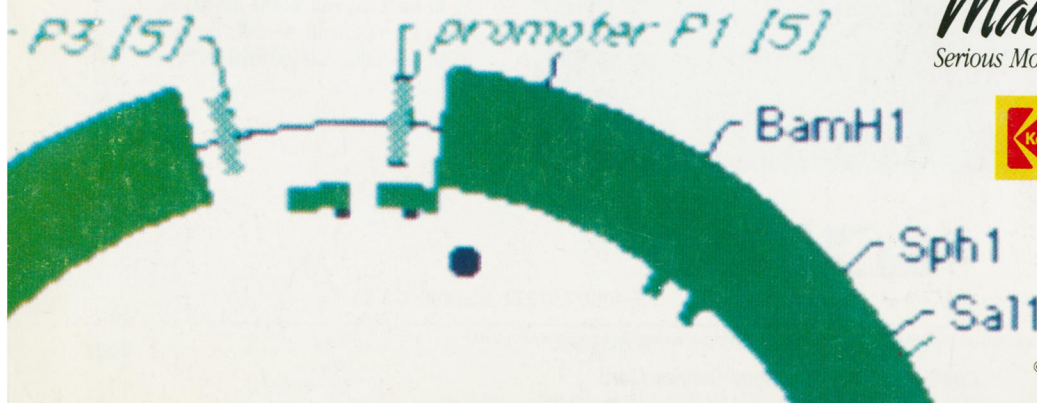
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