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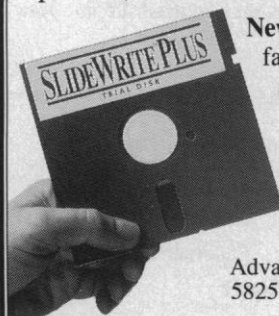
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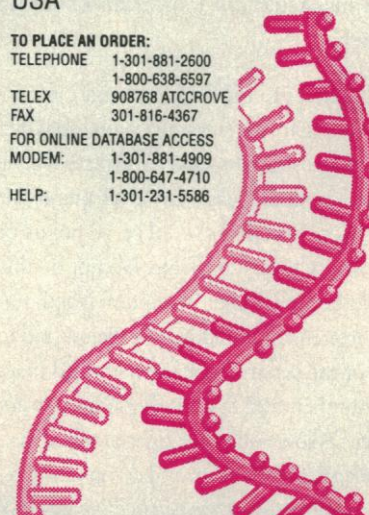
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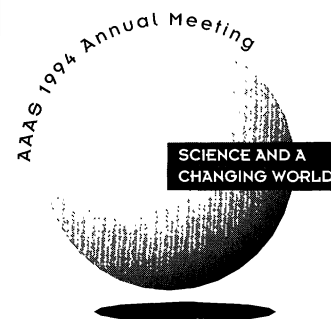
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CALL FOR POSTER PAPERS

San Francisco ■ 18-23 February 1994

Deadline: 15 November 1993



THE POSTER SESSIONS AT THE AAAS ANNUAL MEETING PROVIDE an informal, visually oriented way for you to present contributed papers to a multidisciplinary assembly of your peers. If your poster abstract is accepted, you will be assigned to a poster session and provided with a 4'x 4' bulletin board on which to display graphics and text. Only one poster abstract per first author may be submitted. Poster sessions will be divided among life science, physical science, and social science topic areas. Accepted abstracts received before 15 November will be published in the Annual Meeting Program. Abstracts received after that date will not be published, but may be accepted for display. Applicants will be notified in mid-December by mail, regarding the status of their abstracts.

ence, and social science. First prize will be awarded in each category; second and third are contingent on the number of entries.

AWARDS FOR EACH CATEGORY ARE:

1st prize	\$500
2nd prize	\$250
3rd prize	\$100

Winners will also receive a complimentary one-year AAAS membership, including a subscription to *Science* magazine.

Students who wish to be considered for this distinction should type the words "Student Award Entry" above their poster abstract.

INSTRUCTIONS FOR SUBMITTING POSTER ABSTRACTS:

ENDORSEMENT: An abstract will be considered only if it is endorsed by a AAAS member. Members may endorse their own abstracts. If you do not know a member, try to determine who in your organization gets *Science* magazine (an indication of AAAS membership).

FORMAT: Refer to the sample at right for instructions regarding capitalization, spacing, and proper abstract format. Abstracts will be machine scanned. Please use letter quality or laser printer. Type size should be 10 points or larger. Justify text, if possible. Do not double space, do not underline. Maximum length (including references) is 300 words. Below and to the left of the square, type the name, address, phone number, and fax number of the poster presenter. Below and to the right of the square, type the name, institution, and complete membership number (from *Science* mailing label) of the AAAS members endorsing the poster and obtain his/her signature.

REGISTRATION: The person presenting the poster must be registered to attend the Annual Meeting.

MAILING INSTRUCTIONS: Mail one original plus five photocopies of the abstract flat, do not bend, to: AAAS, Meetings Office, Contributed Papers, 1333 H Street, NW, Washington, DC 20005. Faxes are unacceptable.

STUDENT RESEARCH AWARDS

To encourage the development of young scientists and to recognize their achievements in all fields of scientific research, AAAS will feature exceptional research by undergraduate and graduate students in a special poster session at the Annual Meeting.

A panel of distinguished scientists will evaluate the student posters and award cash prizes for the top presentations in each of three categories: life science, physical sci-

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Topic Area (Education; Life, Physical, Social Sciences) If eligible, type "Student Award Entry"

Skip 5 lines and type Poster Abstract Title in Upper and Lower Case Letters. PRESENTER'S NAME IN UPPER CASE (Institution Name Only [not complete address] in Upper and Lower Case Within Parentheses), Second Author Name in Upper and Lower Case (Institution), Additional Author Names (Institutions).

Skip one line and type camera-ready abstract single-spaced on a white, 8½" x 11" sheet of paper. Maximum length = 300 words, including references. Use a letter-quality or laser printer. Minimum type size = 10 points. Paragraphing may be used. Do not draw a box around the abstract.

If citations are used, skip one line and follow Science reference format.

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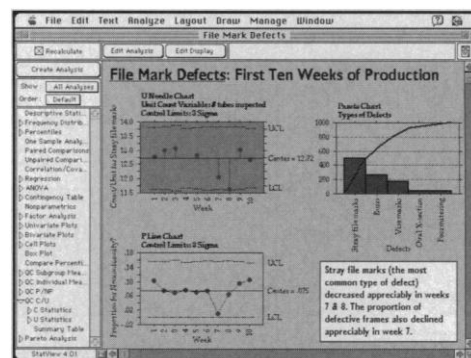
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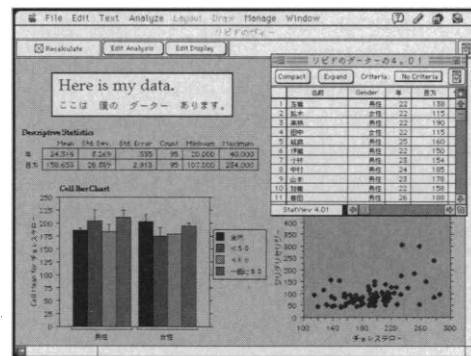
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1994-95 Congressional Science and Engineering Fellowships

PROGRAM: Fellows spend one year working as special assistants on the staffs of members of Congress or congressional committees, working in legislative areas requiring scientific and technical expertise. The program includes an orientation on congressional and executive branch operations and a year-long seminar program on issues involving science and public policy. Fellows receive stipends from their sponsoring societies.

PURPOSE: To provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to make practical contributions to the more effective use of scientific and technical knowledge in government.

CRITERIA: A prospective Fellow must be a postdoctoral to midcareer scientist or engineer; demonstrate exceptional competence in some area of science or engineering; be cognizant of many matters in nonscientific areas; demonstrate sensitivity toward political and social issues; and perhaps most important, have a strong interest and some experience in applying personal knowledge toward the solution of societal problems.

SPONSORS: More than twenty national professional scientific and engineering societies will sponsor or cosponsor Congressional Science and Engineering Fellows in 1994-95:

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of Pharmacy
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American Geophysical Union
American Institute of Biological Sciences
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Science Society of America and regional affiliates
American Society of Mechanical Engineers
American Society of Plant Physiologists
American Society of Zoologists
American Veterinary Medical Association
Biophysical Society
Federation of American Societies of Food
Animal Sciences
Geological Society of America
Institute of Electrical and Electronics Engineers
National Society of Professional Engineers
Office of Technology Assessment

Applicants should apply directly to the appropriate professional society. It is acceptable to apply to more than one society. Stipends, application procedures, timetables, and deadlines vary by society. Further information about the program and a list of the participating societies, with mailing addresses and contact people, is available from:

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- What are the social and policy issues facing us in the future?

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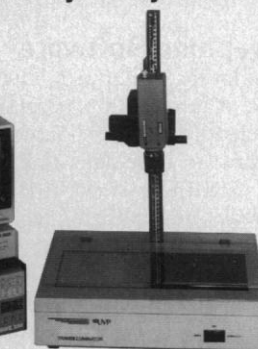
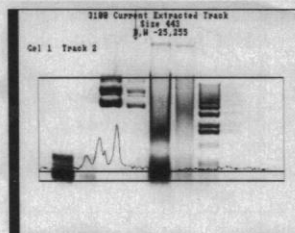
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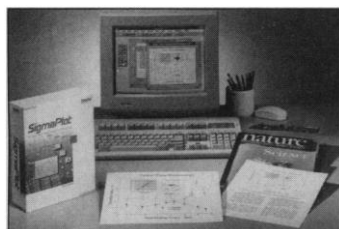
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PCR Internal Standards

PCR MIMICs are nonhomologous DNA fragments for use as competitive internal standards in polymerase chain reaction (PCR) quantitation. Competitive PCR using PCR MIMICs is more sensitive than Northern (RNA) and dot blot quantitation methods and is ideal when RNA is in limited supply. To perform quantitative PCR, serial dilutions of known quantities of PCR MIMIC are added to PCR tubes containing constant amounts of target cDNA. The PCR MIMIC fragment contains the same primer template sequences as the target gene and thus competes with the target sample for primers during PCR amplification. PCR MIMICs are designed to generate a PCR product of different size than the target cDNA. Thus, when PCR products are resolved by gel electrophoresis, the quantity of amplified MIMIC versus target can be compared by visual, radioactive, or nonradioactive means. PCR MIMICs are available for a variety of human and mouse cytokines, growth factors, and control genes. **Clontech. Circle 140.**

Graphing Software

SigmaPlot for Windows is a new release of a graphing program with scientific features—automatic error bars, huge data set handling, nonlinear curve-fitting, axis breaks, multiple axes, regression lines, confidence intervals, reference lines, and more. It allows preparation of customized technical graphs for publication. Users can create two-dimensional graphs and three-dimensional



mesh and scatter plots by selecting from pictures of graph types. Graph attributes, including line

thickness, axes types, symbol choices, error bars, and others can be changed or adjusted from one comprehensive dynamic dialog box or by selecting objects on the graph itself. The program requires an IBM-compatible 386 or higher personal computer, DOS 3.3 or higher or Windows 3.1 with compatible graphics card, a hard disk with 5 megabytes of free memory, 4 megabytes of random access memory, and mouse. **Jandel Scientific. Circle 141.**

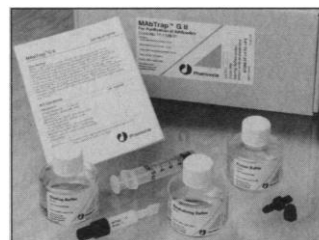
TNF Research Assay

The BLOKINE enzyme immunoassay (EIA) for tumor necrosis factor- α (TNF- α) can be used in research involving endotoxin-induced injury, inflammatory diseases, parasitic infections, viral infections, and renal allograft rejection. The kit is sensitive to 1.5 pg/ml and measures only the bioactive human TNF, not the inactive receptor-bound TNF. **T Cell Diagnostics. Circle 142.**

Antibodies

A full panel of antibodies to p53 tumor suppressor gene products, optimized for use in immunohistochemistry, is available. Alteration of the p53 tumor suppressor gene is the most common genetic lesion known in human cancer. In a panel of antibodies to glutathione-S-transferases (GST), a group of enzymes involved with drug metabolism and detoxifications, separate polyclonal antibodies recognize the three major subclasses of GST. Monoclonal antibody E30 recognizes a fixation-resistant epitope on the external domain of the epidermal growth factor receptor and does not cross-react with blood group antigens. **BioGenex. Circle 143.**

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.



IgG Purification Kit

MABTrap G II is an affinity chromatography kit that purifies monoclonal and polyclonal immunoglobulin G (IgG) from ascites fluid, serum, and cell culture supernatants within 15 min using only a syringe or a simple peristaltic pump. The kit includes a prepacked 1-ml HiTrap Protein G filter, three premade buffer concentrates, a syringe, and Leur adaptor. **Pharmacia LKB. Circle 144.**

Hybridization System

SureSite II System for in situ hybridization is designed for the use of 35 S-labeled antisense probes to localize gene expression in tissues. It is configured into two modules, a transcription module and a hybridization kit. The T7 Probe Kit, with reagents for the synthesis of 50 probes, is for use with DNA templates having a T7 promoter positioned to produce antisense RNA during transcription with T7 RNA polymerase. The Hybridization Reagents Kit contains sufficient reagents for prehybridization, hybridization, and post-hybridization washing of up to 50 standard microscope slides. **Novagen. Circle 145.**

Rapid Chromosome Hybridization

New kits offer a 60-min hybridization and detection procedure for biotin- and digoxigenin-labeled repetitive sequence DNA probes and lower the wash and detection time for sequence and

COATASOME Total Chromosome Probes from 2 hours to 20 min. The five new kits include a Hybridization Kit and detection kits for digoxigenin with fluorescein, digoxigenin with rhodamine, biotin with fluorescein, and biotin with Texas red. The combination of these kits allows the simultaneous use of biotin- and digoxigenin-labeled probes. **Oncor. Circle 146.**

Literature

Gas Chromatography Supplies 1993-94 offers comprehensive information on supplies and instruments, including detectors, a mass spectrometer, a thermal desorber, and more. **Perkin-Elmer. Circle 147.**

Human Genetic Mutant Cell Repository Catalog from the National Institute of General Medical Sciences has more than 5625 cell cultures and 352 DNA samples in the following categories: human-rodent somatic cell hybrid mapping panels, inherited metabolic disorders and normal controls, disorders with defined mutations, well-characterized chromosomally aberrant cell cultures, and a human diversity and vanishing populations collection. **Coriell Cell Repositories. Circle 148.**

Biotechnology Update is a 39-page booklet describing new DNA amplification products such as an ultraviolet transilluminator, a programmable thermal cycler, and a lightweight hand-held scintillation counter for quantifying samples and identifying radioactive hot spots in the lab. The electrophoresis section includes nitrocellulose blotting membranes and a new camera with a complete photodocumentation system. **Whatman. Circle 149.**

PROSEP Fluidised Bed Adsorption is a brochure on an alternative to packed-bed chromatography for the purification of biological molecules. **Bioprocessing Corp. Circle 150.**

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Applications are invited for three tenure-track positions at the **ASSISTANT PROFESSOR** level in the Department of Pharmacology. Exceptional candidates at higher ranks will also be considered. We seek candidates with research interests in neuropharmacology, in cell and molecular pharmacology, and in drug metabolism and bioactivation. Candidates with interests in cancer chemotherapy or cancer biology are also sought. A Ph.D. degree or an M.D. degree, or both, are required as is postdoctoral training. Candidates are expected to develop strong research programs and to contribute to departmental professional and graduate teaching programs. Competitive salary and start-up funds are available. Candidates should submit curriculum vitae, a statement of future research interests, and the names of three references to: **Dr. M. W. Anders, Department of Pharmacology, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642.** Applications will be received until the positions are filled. *The University of Rochester is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are encouraged.*

BOTANIST: ASSISTANT PROFESSOR, tenure-track. Qualifications: Ph.D., commitment to teaching undergraduates, expertise in a specialty such as cell, plant physiology or systematics. Teach introductory biology, botany, courses in the specialty and develop a research program involving undergraduates. Send résumé, statement of research plans and undergraduate teaching philosophy, transcripts and have three letters of reference sent by November 22, 1993, to: **Dr. Gregg Kormanik, Chair, Department of Biology, University of North Carolina at Asheville, Asheville, NC 28804.** *UNCA is an Affirmative Action/Equal Opportunity Employer. Applications from underrepresented groups including minorities, women and people with disabilities are encouraged.*

ASSISTANT PROFESSOR, ANATOMY

Applications are invited for a faculty position at the level of assistant professor in the Department of Anatomy. A Ph.D. degree and one to two years of postdoctoral training are required. Teaching duties will include participating in two of the following courses for first-year medical students: Gross Anatomy; Histology; Neuroscience. Research interests are open. Development of a research program with eventual independent funding is strongly encouraged. Philadelphia College of Osteopathic Medicine (PCOM) is dedicated to teaching excellence. Please send a letter, curriculum vitae, and three references by December 31, 1993, to:

Tage N. Kvist, Ph.D.
Professor and Chairman
Department of Anatomy
Philadelphia College of Osteopathic Medicine
4170 City Avenue
Philadelphia, PA 19131

Starting date negotiable (between February and August of 1994). *PCOM is an Equal Opportunity Employer.*

EVOLUTIONARY BIOLOGY

As part of its continuing development of an ecology/evolution group the Department of Biological Sciences, State University of New York at Buffalo, invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** starting in fall 1994. We seek an individual working in the area of population/evolutionary ecology. The department has strengths in plant biology and aquatic ecology (marine and freshwater). We are developing a program that addresses evolutionary and ecological questions by integrating ecological, physiological and molecular levels of analysis, and we seek an individual who can work at multiple levels of analysis and interact with these groups. The successful candidate will be expected to develop an active, externally funded research program, develop a graduate course in either evolutionary processes or ecological genetics, and contribute to the Department's undergraduate program. Candidates should have two years of postdoctoral or equivalent experience. Applications, including curriculum vitae, statement of research and teaching interests, and three letters of recommendation should be submitted before December 1, 1993, to: **Dr. Howard Lasker, Evolutionary Biology Search Committee, Department of Biological Sciences, SUNY at Buffalo, Buffalo, NY 14260-1300.** *The State University of New York is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

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

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

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

SENIOR FACULTY POSITION

Department of Biochemistry
University of Illinois College of Medicine
at Chicago

Applications and nominations are invited for a senior-level tenured faculty position of **ASSOCIATE** or **FULL PROFESSOR**. We are seeking applicants who have a strong record of research accomplishments, a nationally/internationally recognized, funded research program and a commitment to teaching. All areas of biochemistry will be considered. We are particularly interested in scientists using transgenic mouse technology to investigate problems related to gene regulation in the context of molecular biology and medicine, development, signal transduction and molecular immunology. The Department is one of six basic science departments in the largest College of Medicine in the United States, and consists of 19 full-time faculty and 13 joint appointees. The department, college and campus are well equipped and have research facilities that will support any area of contemporary bio-medical research. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include curriculum vitae, a summary of current and future research plans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after November 1, 1993. Send applications or nominations to: **Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

DEPARTMENT OF BIOLOGY UNIVERSITY OF ROCHESTER ASSISTANT PROFESSOR in MOLECULAR BIOLOGY

The Department of Biology at the University of Rochester invites applications for a tenure-track position in **Molecular Biology** available September 1994. Applicants should have at least two years of postdoctoral training. We are seeking a person who can mount a strong independent research program in an area of molecular biology. The University of Rochester is a private institution with about 4000 undergraduate and about 2000 graduate students. The Department of Biology has a faculty of 21 with research and teaching programs in molecular, cell, and developmental biology as well as molecular evolution and ecology. We have an excellent environment with extensive interactions both within the department and with the Medical School located adjacent to the College of Arts and Science. Screening of applications will begin immediately and continue until the position is filled. Candidates should submit written applications, including curriculum vitae, a brief statement of research and teaching interests, and arrange for three letters of recommendation to be sent to: **Dr. Lasse Lindahl, Chair, Recruiting Committee, Department of Biology, University of Rochester, Rochester, NY 14627.**

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

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSORSHIPS

The Department of Biochemistry and Molecular Biology at the Medical University of South Carolina invites applications to fill two research assistant professor positions. (1) Research assistant professor in molecular biology for membrane receptor-related research. Postdoctoral experience required. Send curriculum vitae and names of references to **Professor Christian Schwabe**. (2) Research assistant professor in molecular genetics. Experience in gene cloning, sequencing and expression is required. Research areas include mapping and cloning of genes involved in hypertension and cardiovascular diseases. Contact **Professor Lee Chao**, Department of Biochemistry and Molecular Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN GENETICS. DUKE UNIVERSITY MEDICAL CENTER. Applications are invited for a tenure-track position in the Section of Genetics at Duke University Medical Center. Although we anticipate filling this position at the **ASSISTANT PROFESSOR** level, we will consider individuals for any level appointment. We are particularly interested in those individuals who are engaged in work utilizing mammalian systems or focusing on the genetics of human disease. The facilities and environment of the Section, which will become the Department of Genetics within this year, are excellent. Applications should include curriculum vitae, a brief description of research accomplishments, a brief description of plans for future research, and the names of three individuals who can serve as referees. Address applications to: **Genetics Search Committee, Section of Genetics, Duke University Medical Center, Box 3054, Durham, NC 27710.** *Duke University Is An Equal Opportunity/Affirmative Action Employer.*

University of California, Santa Cruz ASSISTANT PROFESSOR IN MOLECULAR BIOLOGY (RNA)

Applications are invited for a tenure-track faculty position in Molecular Biology beginning fall 1994, contingent upon availability of funding. Candidate's research should focus on RNA structure and function. Position will be associated with the Department of Biology and the Markey Center for RNA Study. Minimum qualifications: Ph.D. or equivalent in Biology or a closely related field, postdoctoral research experience, and university teaching experience or demonstrated potential for university teaching. Salary: \$35,900 to \$38,800 (9-month basis).

Applicants should send curriculum vitae, a brief description of research and teaching interests, publications, and have letters of recommendation from three referees by December 15, 1993, to: **RNA Search Committee, Department of Biology, Sinshier Laboratories, University of California, Santa Cruz, CA 95064.** Please refer to position #231-901 in your reply.

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

UNIVERSITY OF TORONTO CENTRE FOR RESEARCH IN NEURODEGENERATIVE DISEASES

Applications are invited for two positions in a recently established neurodegenerative disease research centre with emphasis on Alzheimer's disease. Ph.D.'s or M.D.'s at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level are sought to join this team of 7 P.I.'s. Candidates must have expertise in one of the following areas of neurobiology: transgenic models, biochemically oriented molecular biology, protein structure, or gene regulation, with a desire to apply their expertise to Alzheimer's disease. Start-up funds provided; successful candidates must initiate independent and original research programs.

The University of Toronto encourages applications from qualified men and women, members of visible minorities, aboriginal peoples and persons with disabilities.

Send curriculum vitae, a research statement and three letters of reference by December 15, 1993, to: **Dr. D. R. McLachlan, Centre for Research in Neurodegenerative Diseases, Tanz Neuroscience Building, 6 Queen's Park Cr. West, Toronto, Ontario, Canada M5S 1A8.**

POSITIONS OPEN

FACULTY POSITION IN NUCLEAR MAGNETIC RESONANCE. The University of Florida Center for Structural Biology had a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** position in Magnetic Resonance in conjunction with the **National High Magnetic Field Laboratory (NHMFL)**. This person will conduct innovative research emphasizing NMR using existing 300 and 600 MHz spectrometers in the Center, with access to a 500. Additional support is provided through NHMFL facilities, including prototype magnets and spectrometers operating at 17T and higher. Applicants must have Ph.D. Degree, a minimum of 1 year of postdoctoral experience in NMR spectroscopy, and interest in developing and expanding experimental techniques. Collaborative research, in areas such as Biochemistry, Pharmacology, and Physiology, are an important aspect of this position.

Anticipated starting date is July 1, 1994. Salary commensurate with experience. Send curriculum vitae, statement of research interests, and three letters of reference by December 31, 1993, to: **Dr. Thomas Mareci, Director, UF Center for Structural Biology, Box 100245, Gainesville, FL 32610.** *Affirmative Action/Equal Opportunity Employer, M/F/D/V.*

ASSISTANT/ASSOCIATE PROFESSOR: Tenure-track position for NMR spectroscopist with research interests in applying NMR to biochemical problems. The successful candidate will have primary responsibility for a Varian VXR 500S and will be expected to pursue independently funded research and to participate in departmental teaching activities. Interested persons should submit curriculum vitae, a summary of research interests, and three letters of recommendation to: **NMR Faculty Search Committee, Department of Biochemistry, University of Kentucky Medical Center, Lexington, KY 40536-0084.**

An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN HUMAN GENETICS

As part of a major expansion in human genetics, the Laboratory of Genetics, University of Wisconsin-Madison, seeks to hire an **ASSISTANT or ASSOCIATE PROFESSOR**. Candidates should possess an M.D. and/or Ph.D. degree and direct an active research program in human genetics. Joint appointments with appropriate clinical departments are possible for M.D. applicants. Laboratory space will be in the new Genetics-Biotechnology Building under construction. Please send curriculum vitae, a statement of research interests, three letters of recommendation, and representative reprints or preprints to: **Human Genetics Search Committee, c/o Dr. Richard Spritz, 118 Genetics, 445 Henry Mall, Madison, WI 53706.** *The University of Wisconsin-Madison is an Affirmative Action Employer. Women and minority scientists are encouraged to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.*

MSU-DOE PLANT RESEARCH LABORATORY Michigan State University FACULTY POSITION IN PLANT BIOLOGY

The MSU-DOE Plant Research Laboratory has a tenure-track faculty position available at the **ASSISTANT PROFESSOR** level. Applications are being sought from researchers who will be working toward the mechanistic understanding of fundamental questions in plant biology using modern experimental approaches of biochemistry, genetics, or cell and molecular biology.

The Plant Research Laboratory is operated with support from the U.S. Department of Energy and provides a stimulating atmosphere and excellent facilities for research in the plant sciences. Faculty members are jointly appointed in an appropriate academic department. Generous laboratory space and set-up support as well as continuing research funding will be provided.

Applicants should have postdoctoral research experience with demonstrated productivity and evidence of potential for independent research. In order to assure consideration, applications should be received preferably by December 6, 1993. Applications, along with curriculum vitae, description of research accomplishments and future interests, and three letters of recommendation, should be sent to: **Dr. Kenneth Keegstra, Director, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824.** *Michigan State University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

THREE ASSISTANT PROFESSORSHIPS.

Ph.D. required. Must demonstrate excellence in teaching and desire to promote undergraduate research. Will teach principles of biology course for non-majors and one of following specialties: **Vertebrate Anatomist/Physiologist** to teach human A & P course; Broadly trained **Botanist** to teach general botany and plant physiology; **Geneticist** with expertise in molecular genetics of eukaryotic organisms to teach general genetics course and share in teaching of molecular biology. Send letter of application, curriculum vitae and 3 letters of recommendation to: **Dr. Sally Dennis, Chair, Personnel Committee, Department of Biology, Radford University, Radford, VA 24124.** Screening will begin November 1, 1993, and continue until positions are filled.

The Department of Biological Sciences, California State University, Long Beach, invites applications for 2 **ASSISTANT/ASSOCIATE PROFESSOR** tenure-track positions beginning fall 1994 in: **GENETICS:** Primary teaching responsibilities in genetics and one or more of the areas of biotechnology; molecular, cellular or developmental biology. Preference given to applicants with research expertise in the use of molecular genetics for studying problems in developmental and/or cellular biology. **MEDICAL BACTERIOLOGY:** Primary teaching responsibilities in medical microbiology and related areas. Preference given to candidates who can teach senior/graduate courses in immunology or medical mycology.

Candidates must have a strong commitment to teaching at the undergraduate and M.S. levels in an ethnically and culturally diverse campus community. Applicants will be expected to show potential for teaching in the required subject areas and for developing and sustaining an independent, externally funded, research program involving students. Research funds available, and for biomedical research may be supplemented with funds from the Howard Hughes Medical Institute. Applicants with a Ph.D., postdoctoral experience and a record of published research should submit a letter of application, curriculum vitae, a brief statement of research and teaching interests, and 3 letters of recommendation to: **Dr. David L. Soltz, Chair, Department of Biological Sciences, California State University, Long Beach, CA 90840-3702.** Deadline January 7, 1994, or until filled. *California State University, Long Beach, is an Equal Opportunity/Affirmative Action/Title IX Employer.*



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

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

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

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

MASS SPECTROMETRIST

ASSOCIATE or FULL PROFESSOR (analytical/bioanalytical chemistry) with preference in biological, environmental or materials mass spectrometry. Excellent facility and support resources are available. Deadline November 30, 1993, or until the position is filled. Send curriculum vitae, research proposal(s) and reprints to: **Prof. Lawrence Parkhurst, Search Committee Chair, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE 68588-0304.** Telephone: 402-472-3316; FAX (private): 402-472-2044; Internet: lparkhur@unl.edu. *The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Dr. Parkhurst.*

X marks the spot

where exciting research in human genetics is currently going on. The place is the **Glaxo Research Institute at Glaxo Inc.**, a world leader in prescription pharmaceuticals.

Here at our new, magnificently equipped R&D facility in **Research Triangle Park, North Carolina**, scientists are providing key contributions to Glaxo's Human Genetics Initiative, an international biopharmaceutical R&D project. The Genetics Initiative complements programs in bioinformatics, structure-based drug design, and combinatorial chemical libraries to provide an innovative foundation for the discovery of novel medicines.

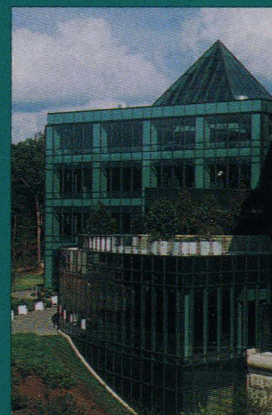
Join Glaxo Inc., part of the worldwide Glaxo Group, for the challenge of advancing human genome research to develop therapeutics for common diseases such as diabetes, osteoporosis, and cancer. Currently, the Molecular Sciences Division is seeking

SENIOR MOLECULAR GENETICISTS for:

- Mapping, positional cloning, and characterization of human disease-related genes.
- Functional analysis using techniques of somatic cell genetics, homologous recombination, dominant negative mutations, antisense oligonucleotides and related technologies.
- Cloning, biological characterization, and structure-activity studies of new receptor families.

The rewards of working with Glaxo include excellent salaries and a flexible benefits package, a beautiful head-

quarters campus, ultra-modern facilities and the research-intensive academic location of Research Triangle Park. The area boasts a moderate climate, excellent residential and recreational advantages, and proximity to the major metropolitan area of Raleigh. Please send your resume, to include salary history, to: **Human Resources Department, Job #ASC641601, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V.



Glaxo Inc.

POSITIONS OPEN

BIOLOGICAL LIMNOLOGIST

The University of Nevada, Las Vegas, Department of Biological Sciences and its Limnological Research Center announce a tenure-track position, starting August 1994, for an **ASSISTANT PROFESSOR in BIOLOGICAL LIMNOLOGY** (P08003). The successful candidate will establish and maintain a rigorous, independently funded research program within the Center, teach at upper-division undergraduate and graduate (M.S. or Ph.D.) levels and contribute to the administration of the Center. Preference will be given to limnologists with specializations in photosynthetic systems (planktonic, benthic or littoral), microbial interactions (including, but not limited to, nutrient dynamics and cycling) or limnological systems ecology (functional integration of freshwater ecosystems). Ph.D. required, postdoctoral experience preferred. Applicants should submit statements of research and teaching interests, curriculum vitae, representative publications and the names of three potential referees to: **The Department of Biological Sciences, c/o Dr. Warren Burggren, Chair, University of Nevada, Las Vegas, 4505 Maryland Parkway, Box 454004, Las Vegas, NV 89154-4004.** Review of completed applications will begin November 22, 1993.

The University of Nevada, Las Vegas, is an Equal Opportunity/Affirmative Action Employer. UNLV employs only U.S. citizens and aliens authorized to work in the United States.

CELL BIOLOGIST: Tenure-track **ASSISTANT PROFESSOR** position starting September 1994 in a multidisciplinary department offering undergraduate degrees in biology, microbiology, biochemistry, among others. Teaching duties will include upper-level courses in cell biology and general genetics and occasional introductory courses. Applicants must possess a strong interest in undergraduate teaching and productive research. Ph.D. required, postdoctoral experience preferred. Submit curriculum vitae, short statement of research interests, and names and telephone numbers of three references to: **Cell Biology Search Secretary, Department of Natural Sciences, University of Michigan-Dearborn, Dearborn, MI 48128-1491.** Review of applications will begin December 15, 1993, and continue until the position is filled. *The University of Michigan-Dearborn is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

DIVISION OF BIOLOGICAL SCIENCES UNIVERSITY OF KANSAS

NEUROBIOLOGIST: We invite applications for a tenure-track position at the **ASSISTANT PROFESSOR** level to start August 16, 1994. Applicants must have a Ph.D. or M.D. and postdoctoral experience in Neurobiology, Cell Biology, Molecular Biology or related field. Candidates with research interests in neurotransmission, neurodegeneration, signal transduction, neural development, or cytoskeletal function will complement those of current faculty in this and related departments at the University, although applicants in other fields are encouraged to apply. Successful candidates will be expected to maintain a strong independent research program and participate in undergraduate and graduate teaching. Applicants should send curriculum vitae, statement of research plans, and names of three references to: **Dr. Nancy Dahl, Department of Physiology and Cell Biology, University of Kansas, Lawrence, KS 66045.** Review of applications will begin November 15, 1993, and continue until the position is filled. *Equal Opportunity/Affirmative Action Employer.*

INSECT PHYSIOLOGIST, ASSISTANT PROFESSOR. The Department of Entomology, Iowa State University, invites application for tenure-track 12-month faculty position as of July 1994 to perform research on basic physiological or biochemical processes in insects, using molecular biological/biochemical techniques with potential for novel approaches to insect control; supervise graduate students; teach graduate courses in Insect Physiology and in area of specialization. Ph.D. in Entomology/related discipline required. Postdoctoral experience preferable. Send curriculum vitae, statement of research interests, representative reprints, and 3 letters of recommendation to: **Joel R. Coats, Search Committee Chair, Department of Entomology, Iowa State University, Ames, IA 50011.** Search open until December 1, 1993, or until position filled. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ENVIRONMENTAL MICROBIOLOGIST

A full-time tenure-track **ASSISTANT PROFESSORSHIP** is available in the Department of Biology at the University of Dayton beginning August of 1994. Individuals with a specialty in environmental microbiology/microbial ecology with demonstrated expertise in integrated field and laboratory research are encouraged to apply. Candidates should have experience in the use of bioinstrumentation in both the field and laboratory. The successful applicant will be expected to develop an active research program, teach courses at both the undergraduate and graduate level, mentor M.S. and Ph.D. students, and participate in a newly developing environmental science program. A Ph.D. in microbiology and postdoctoral experience are required. Interested applicants should send curriculum vitae, recent reprints, statement of research and teaching interests and three letters of reference to: **Dr. Robert J. Kearns, Department of Biology, University of Dayton, Dayton, OH 45469-2320.** Closing date is November 29, 1993. *The University of Dayton is an Affirmative Action/Equal Opportunity Employer.*

PLANT MOLECULAR BIOLOGIST

The Department of Biological Sciences at the State University of New York at Binghamton invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level for fall 1994. We are seeking individuals who are studying significant problems in plant biology through the application of molecular biology techniques. Possible areas of research include plant growth and development, or plant interaction with microbes, herbivores, or the environment. The successful applicant is expected to develop a vigorous externally funded research program, and to teach undergraduate and graduate courses in biochemistry and/or molecular biology. Submit curriculum vitae, statement of research and teaching interests, and three letters of recommendation to: **Dr. Karl A. Wilson, Department of Biological Sciences, State University of New York at Binghamton, Binghamton, NY 13902-6000** by December 1, 1993. Binghamton University is one of the four doctoral granting campuses of the SUNY system and is committed to growth in research and graduate education. *Strongly committed to Affirmative Action. Recruitment conducted without regard to race, color, sex, religion, age, disability, marital status, sexual orientation or national origin.*

GENETICS, IMMUNOLOGY, GENERAL BIOLOGY. ASSISTANT PROFESSOR to teach genetics, immunology, and general biology. Ability to also teach microbiology or parasitology is desirable. Dedication to quality teaching in both the general biology and upper-division courses expected, as well as a desire to involve undergraduate students in research. Ph.D. required. *Affirmative Action/Equal Opportunity Employer.* Please send letter of application, curriculum vitae, transcripts, and at least three letters of reference by February 1, 1994, to: **Christine Wilcox, Secretary to the Biology Search Committee, Hanover College, P.O. Box 108, Hanover, IN 47243.**

MOLECULAR VIROLOGIST

The University of Arizona College of Medicine invites applications for a full-time tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position in the Department of Microbiology and Immunology. The applicant's area of expertise should be in virology with an emphasis on the molecular biology and immunology of animal viruses. A record of productive research on the molecular basis of infectious diseases is desirable. The College of Medicine and the University of Arizona offer an excellent opportunity to develop independent and collaborative research programs within a multidisciplinary basic science research environment. Duties will include development of an independent research program and instruction in virology to medical and graduate students. Candidates should have an earned doctorate, at least two years of postgraduate training, and demonstrated research achievement. Salary will be commensurate with experience and training. Applicants should send curriculum vitae, statements of research plans and teaching experience and names and addresses of three references to: **Dr. John J. Marchalonis, Professor and Chairman, Microbiology and Immunology, College of Medicine, University of Arizona, Tucson, AZ 85724.** Telephone: 602-626-6409; FAX: 602-626-2100. *The University of Arizona is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply for this position.*

POSITIONS OPEN

VIROLOGIST, ASSISTANT/ASSOCIATE PROFESSOR tenure-track position. Applicants must have a Ph.D. and/or M.D. with relevant postdoctoral experience. Applicants at the assistant professor level will be judged on their potential to develop a vigorous independent research program that can attract extramural support. Applicants to be considered for associate professor must have a significant publication record and extramural funding. Candidates will also be expected to teach medical and graduate students as well as supervise dissertation research. The position offers the opportunity to interact with other virologists and to utilize excellent facilities. An attractive start-up package will be available. *Minority and female candidates are encouraged to apply.* Submit curriculum vitae, statement of research interests and a list of three references to: **Dr. Paul C. Montgomery, Professor and Chair, Department of Immunology and Microbiology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR AND CELL BIOLOGY UNIVERSITY OF CALIFORNIA BERKELEY

The Department of Molecular and Cell Biology invites applications for a tenure-track **ASSISTANT PROFESSOR** position, with appointment beginning July 1, 1994. Candidates should have demonstrated excellence, originality, and productivity in research in genetics or developmental biology and should have a strong interest in undergraduate and graduate teaching.

Preference will be given to candidates in the areas of human genetics and/or genetic and developmental studies of other vertebrates.

Applications should include a cover letter, detailed curriculum vitae, an up-to-date list of all publications and one copy of each of three of the most significant papers, a brief statement (1 to 2 pages maximum) of research objectives and teaching interests, and three letters of evaluation (to be sent directly from three individuals who are most familiar with the candidate's accomplishments and potential).

The closing date for acceptance of applications is December 17, 1993. Send applications to: **Genetics and Development Search Committee, MCB Department, 401 Barker Hall, University of California, Berkeley, CA 94720.** **EARLY APPLICATIONS ARE ENCOURAGED.**

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

ANALYTICAL CHEMISTRY-AUBURN UNIVERSITY: ASSISTANT PROFESSOR, fall 1994, tenure-track, exceptional candidates may be considered at higher levels. Preference given to research in bioanalytical, separations, or environmental analytical chemistry. Ph.D. and relevant postdoctoral experience required. Review begins December 1, 1993. Send curriculum vitae, proposed research program, and three letters of reference to: **Dr. J. H. Hargis, Department of Chemistry, Auburn University, AL 36849-5312.** *Auburn University is an Affirmative Action/Equal Employment Opportunity Employer. Minorities and women are encouraged to apply.*

CELL BIOLOGIST/MICROBIOLOGIST

The Trinity College Department of Biology invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** to begin in the fall term, 1994. Applicants must have a Ph.D.; postdoctoral experience is preferred, but not required. Annual teaching duties include a general microbiology course for which command of prokaryotic biology is essential, and participation in a team-taught course of introductory biology; in addition, a course in cell biology and one in an area of the applicant's interest is taught in alternate years. Every other year, offering a course for non-majors is expected. The candidate should initiate and pursue a program of independent research in which upper-level students may participate. Excellent facilities and start-up funds are available. Send curriculum vitae, graduate and undergraduate transcripts, and three letters of recommendation to: **Robert H. Brewer, Chair, Department of Biology, Trinity College, Hartford, CT 06106.** Evaluation of applications will begin 1 December 1993 and continue until the position is filled. *Trinity College is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from minorities and women.*

Staff
Research Associate
-PHARMACOLOGY-

Athena Neurosciences, Inc. is a biotechnology-based company committed to the discovery and development of new products to diagnose and treat diseases of the central nervous system. We are currently seeking a Staff Research Associate to coordinate the day-to-day operations of the biochemical pharmacology screening lab.

DUTIES: Perform various biochemical/cell assays; maintain laboratory equipment to ensure the high throughput necessary to meet the needs of drug discovery; oversee data analyses and report generation. **REQUIRES:** M.S./B.S. with 5-10 years experience in and familiarity with all aspects of a biochemical pharmacology lab; ability to assist with converting research assays into high throughput screens and effectively communicate results both verbally and in writing; experience with automated screening equipment a real plus.

Athena offers an innovative and exciting professional, scientific environment in addition to competitive salaries and benefits. Please send resume to: Athena Neurosciences, Attn: Human Resources, S1022-SRA, 800F Gateway Blvd., South San Francisco, CA 94080. EOE.



NYU
Medical
Center

Assistant Research Scientist

NYU Medical Center currently has a postdoctoral position available for a recent Ph.D with experience in mammalian molecular biology and biochemistry to study signal transduction mechanisms in response to cytokines and growth factors.

Please send C.V. and three letters of recommendation to Ms. Maha Singh, Human Resources Dept., Room C-49, NYU Medical Center, 550 First Avenue, New York, NY 10016. Or fax to (212) 263-8211. Resumes must be received by Nov. 15. EOE, M/F.

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MACRONEX – an emerging biopharmaceutical discovery and development company pursuing novel therapeutics for inflammatory diseases, has become a growing force in its field. As a result of continuing progress and growth, we have several challenging opportunities available.

DIRECTOR/ASSOCIATE DIRECTOR Immunopharmacology

Individual will be responsible for managing a group of scientists with broad levels of experience and successfully directing schedule driven research projects. Requirements at both levels include: Ph.D./M.D. degree, experience in the pharmaceutical or biotechnology industry combined with a strong scientific background with relevant research in cell biology, immunology, or pharmacology. Experience must include successful management of a research development group and excellent oral and written communication skills. Director level requires 8-10 years of experience; Associate Director requires 5-8 years of experience. **Position # S012001.**

DIRECTOR/ASSOCIATE DIRECTOR/MANAGER Bioassays

Individual will be responsible for developing and managing an automated drug discovery process. Requirements at all levels are: Ph.D., experience in the pharmaceutical or biotechnology industry with a successful track record of developing and managing an automated drug discovery process. Familiarity with database design, organization and management of various automated sample handling equipment and excellent oral and written communication skills are required. Exposure to cell-based assays and various immunological techniques such as ELISA are desirable. Director level requires 8-10 years of experience; Associate Director requires 5-8 years of experience; and Manager level requires 3-5 years of experience. **Position # S013001.**

SENIOR SCIENTIST/SCIENTIST Cytokine Biology

Several openings exist at the Senior Scientist and Scientist levels in our Cytokine Biology Group. Requirements: Ph.D. or M.D. Senior Scientist level requires 8-10 years of postdoctoral experience; and Scientist level requires 5-8 years of experience. Both levels require significant scientific accomplishments in academia or industry. Demonstrated ability to work successfully as a key member of a research team, as well as, an independent researcher and strong oral and written communication skills are also required. Prior experience in the pharmaceutical or biotechnology industry is preferred. **Position # S014001.**

SENIOR SCIENTIST/SCIENTIST Protein Chemistry

Openings exist at the Senior Scientist and Scientist levels. Requirements: Senior Scientist with Ph.D., and 8-10 years of experience; Scientist level requires 5-8 years of experience. Direct experience in successful purification of biologically active protein therapeutics from natural or recombinant sources. Both positions require significant scientific accomplishments and excellent oral and written communication skills. **Position # S015001.**

DATA MANAGER Biopharmaceutical Screens

Individual will be responsible for the design, implementation and maintenance of a data management process involved in bioassays and other screens. Directly responsible for data entry, spreadsheet design, result analysis and report generation. Requirements: AA degree in information/data processing and 5 to 8 years of data management experience in biopharmaceutical screens, or B.S. degree in Computer Science, MIS, information processing or related area, and 3 to 5 years of directly related experience. Strong background in PC-based MS-DOS related programs including FOXPRO and EXCEL, as well as database, spreadsheet design and management are also required. **Position # S012003.**

MACRONEX offers competitive salaries and benefits including a stock participation plan. We're located in the highly desirable Research Triangle Park, in NC, rated as one of the fastest growing and most desirable areas in the US, offering tremendous educational, cultural and recreational opportunities. Interested candidates should send their resume and CV, indicating position number, to: **Human Resource Manager, MACRONEX, INC., 120-700 Southcenter Court, Morrisville, NC 27560.** (No agencies or phone calls, please.) An Equal Opportunity Employer.

POSITIONS OPEN

CELL BIOLOGIST. The Department of Biology at St. Mary's College of Maryland, a small public, liberal arts honors college, is seeking a tenure-track **ASSISTANT PROFESSOR** beginning August 1994. Candidates must have completed a Ph.D. in cell biology or biology with demonstrated proficiency in cell biology and have research experience in cell or membrane biology. Successful candidates will be expected to participate in teaching Genetics or Principles of Biology for majors, an upper-division course in Cell Biology, and Contemporary Bioscience for non-majors, as well as establish a research program involving undergraduate students. Review of applications will begin November 1, 1993, and continue until the position is filled. Applicants should send curriculum vitae, a statement of their teaching philosophy and future research plans, unofficial transcripts, and three letters of reference to: **William E. Williams, Chair, Department of Biology, St. Mary's College of Maryland, St. Mary's City, MD 20686.** St. Mary's College of Maryland is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK BIOLOGIST St. Olaf College

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning September 1, 1994. Teaching responsibilities will include introductory biology for majors or non-majors and one or more upper-level courses in human anatomy and physiology, comparative anatomy, evolution, or neurobiology. The successful applicant will be expected to develop an active research program that involves undergraduate students. Qualifications for the position include a Ph.D., postdoctoral or comparable research experience, and demonstrated experience and ability in teaching. Send curriculum vitae, undergraduate and graduate transcripts, a statement of teaching and research interests, and three letters of recommendation to: **Kathleen Fishbeck, Chair, Department of Biology, St. Olaf College, Northfield, MN 55057** by November 15, 1993. St. Olaf College is a co-educational liberal arts college of the church in the Lutheran tradition (ELCA). St. Olaf is an Equal Opportunity Employer.

BIOCHEMISTRY FACULTY POSITION UNIVERSITY OF COLORADO, BOULDER

The Department of Chemistry and Biochemistry invites applications for a tenure-track faculty position. Preference will be given to candidates at the **ASSISTANT PROFESSOR** level, but candidates at all levels will be considered. Applicants must have a Ph.D. degree and enthusiasm for teaching biochemistry at the undergraduate and graduate levels. Candidates will be expected to develop an innovative research program, which may be in any area of biochemistry. We particularly encourage applicants who are using biochemical approaches to address problems of biological regulation, or who work at the interface between biochemistry and cell biology.

Applicants should send curriculum vitae and statement of research interests, and have three letters of reference sent to: **W. S. Dynan, Chair Biochemistry Search Committee, Department of Chemistry and Biochemistry, University of Colorado, Campus Box 215, Boulder, CO 80309-0245.** Applications will be evaluated beginning November 15, 1993, with final application deadline of December 1, 1993, and an earliest starting date of July 1, 1994. *The University of Colorado at Boulder is strongly committed to principle of diversity. We are interested in receiving applications from a broad spectrum of persons, including women, members of ethnic minorities, and disabled individuals.*

ASSISTANT PROFESSOR OF ENTOMOLOGY: Tenure-track, 12-month position. Cornell University-N.Y.S. Agricultural Experiment Station, Geneva, New York. Research (70%) and extension (30%) responsible for arthropod pests of grapes and small fruits. Develop research in biology and ecology of pests in vineyards and small fruit ecosystems and IPM strategies, and extension program providing pest control recommendations. Ph.D. in applied entomology including insect population ecology. Ability to interact with growers, extension agents and researchers. Attractive benefits package. Closing: January 15, 1994. Send curriculum vitae, transcripts, and 3 references to: **Dr. W. Harvey Reissig, Cornell University, Department of Entomology, Geneva, NY 14456.** Cornell University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, ANATOMY

Applications are invited for a faculty position at the level of assistant professor in the Department of Anatomy. A Ph.D. degree and one to two years of postdoctoral training are required. Teaching duties will include participating in two of the following courses for first-year medical students: Gross Anatomy; Histology; Neuroscience. Research interests are open. Development of a research program with eventual independent funding is strongly encouraged. Philadelphia College of Osteopathic Medicine (PCOM) is dedicated to teaching excellence. Please send a letter, curriculum vitae, and three references by December 31, 1993 to:

**Tage N. Kvist, Ph.D.
Professor and Chairman
Department of Anatomy
Philadelphia College of Osteopathic Medicine
4170 City Avenue
Philadelphia, PA 19131**

Starting date negotiable (between February and August of 1994). PCOM is an Equal Opportunity Employer.

ASSISTANT PROFESSOR

A position is presently open for a tenure-track Assistant Professor in the Department of Obstetrics and Gynecology at the University of Wisconsin. This position will be primarily dedicated to research related to maternal fetal medicine and perinatal biology. Qualifications include at least three years of postdoctoral training. Molecular biology orientation is required to quantify RNA, isolate cDNA clones and apply PCR techniques. Candidate must be able to establish an independent laboratory and interact directly in a clinical department for the training of fellows by fostering a scientific environment that is conducive to integration of both clinical and basic science interests. The individual will be expected to obtain extramural funding and to compete on a national level for grants. *The University of Wisconsin is an Equal Opportunity Employer and encourages inquiries from women and minority applicants.* If interested, please send curriculum vitae to: **Douglas W. Laube, M.D., Chairman, Department of Obstetrics and Gynecology, 600 Highland Avenue, Room H4/654, Madison, WI 53792.**

MOLECULAR RADIOBIOLOGIST: The Department of Radiation Oncology at the University of North Carolina in Chapel Hill invites applications for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the Division of Molecular Radiobiology. We are seeking a candidate to develop a strong research program with a molecular biological orientation. Prospective candidates can be either Ph.D. or M.D. scientists with a strong laboratory-based research background. Preference will be given to candidates whose research complements existing research interests in DNA damage and repair, cellular and tumor radiation biology and gastrointestinal malignancies. Applications including curriculum vitae and the names and addresses of three academic referees should be sent to: **Dr. James A. Raleigh, Department of Radiation Oncology, CB 7512, North Carolina Clinical Cancer Center, Chapel Hill, NC 27599-7512.**

UNC is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to identify themselves voluntarily in their applications.

AQUATIC BIOLOGIST/ECOLOGIST

The Department of Ecology, Evolution, and Organismal Biology at Tulane University invites applications from aquatic biologists for a tenure-track position at the **ASSISTANT PROFESSOR** level. The successful applicant will focus on ecological processes in Gulf Coast freshwater or estuarine systems and will be willing to work on applied ecological problems as well as conduct basic research. This individual will be expected to train undergraduate and graduate students through course offerings and research opportunities; to participate in active ecology and bioenvironmental sciences programs both within the department and in the University's Center for Bioenvironmental Research; and to be competitive in attracting outside funding.

Applicants should submit curriculum vitae, brief description of teaching and research interests and names of three references by November 30, 1993, to: **John Barber, EEO Biology, Tulane University, New Orleans, LA 70118.**

Tulane University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION IN CELL AND MOLECULAR BIOLOGY, University of Connecticut Health Center. The Department of Microbiology is seeking to fill a tenure-track position at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Candidates whose research involves the application of genetic and biochemical techniques to fundamental problems of cellular and molecular biology are encouraged to apply. We are particularly interested in candidates whose research uses prokaryotic or lower eukaryotic organisms. Applicants should have at least two years of postdoctoral experience and the ability to develop a high-quality research program and to teach effectively at the graduate level in the Program for Molecular Biology and Biochemistry. Application should include complete curriculum vitae including description of research experience and future research plans, copies of the candidate's most significant publications, and names of at least three references, and should be submitted to: **Chair, Search Committee, Department of Microbiology, University of Connecticut Health Center, Farmington, CT 06030.**

An Affirmative Action/Equal Opportunity Employer, M/F/PwD/V.

EUNICE KENNEDY SHRIVER CENTER FOR MENTAL RETARDATION

The Biomedical Sciences Division of the Shriver Center has an immediate opening for a **MOLECULAR BIOLOGIST**, at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level, to establish a high-quality basic research program in neuroscience. Candidates should have expertise in the application of molecular biology tools to research in developmental neurobiology and/or neurobiology of genetic disorders and an appropriate background to participate in a program project on the Role of Glycoconjugates in the Development of the Nervous System. Candidates should have an active independent research program as well as a strong potential for independent funding.

The Shriver Center is located in suburban Boston, is affiliated with Massachusetts General Hospital/Harvard Medical School and offers an excellent interactive environment. Ample opportunities are available for collaborative research within the greater Boston biomedical community and for joint appointments at MGH/Harvard.

Interested persons should submit curriculum vitae, a short summary of research plans and names of three references to: **Dr. Firoze Jungalwala, Chairman of the Search Committee, Biomedical Sciences Division, E. K. Shriver Center, 200 Trapelo Road, Waltham, MA 02254.** Telephone: 617-642-0136, FAX: 617-893-4824.

An Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITIONS

The Department of Biochemistry and Molecular Biology at the Medical University of South Carolina is seeking individuals at the **ASSISTANT** or beginning **ASSOCIATE PROFESSOR** level to fill three state-supported positions. Research areas of particular interest are: (1) DNA-protein interactions, (2) membrane receptors/signal transduction, and (3) biochemistry and molecular biology of cell growth and differentiation. Applicants must hold doctoral degrees and have at least two years of postdoctoral experience. Successful candidates will be expected to develop independent, extramurally supported research programs, and participate in the teaching activities of the department. The search will remain open until the positions are filled. Send curriculum vitae, statement of research plans, and the names of three references to: **Dr. Barry E. Ledford, Department of Biochemistry and Molecular Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

The Dragen Corporation is seeking a **SENIOR RISK ASSESSOR** to prepare and to supervise the preparation of risk assessments. The preferred candidate will have a strong understanding of risk assessment methods and a strong academic background in toxicology or other relevant discipline. Knowledge of U.S. EPA's risk assessment process and pertinent environmental regulations such as SARA and RCRA is expected. A Ph.D. in an appropriate field and a minimum of 2 years of relevant experience is preferred. If you are interested, please send a résumé and a letter in confidence to: **The Dragen Corporation, 30445 Northwestern Highway, Suite 260, Farmington Hills, MI 48334.**

Postdoctoral Opportunities In The Biomedical Sciences.

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

Molecular Genetics and Biology **David M. Mott, PhD**

A variety of methods are being utilized to study the genetic determinants of non-insulin-dependent diabetes mellitus in humans. Current efforts focus on locating and characterizing genes linked with metabolic abnormalities previously identified in subjects with this disease. Phoenix Epidemiology and Clinical Research Branch (OE-39), NIDDK, 4212 N. 16th Street, Room 541, Phoenix, Arizona 85016

Transcription Factor IID **Yoshihiro Nakatani, PhD**

The molecular mechanisms of transcriptional initiation and regulation are being investigated and the specific roles of Transcription Factor IID in these processes are being determined. Applicants must have less than five years postdoctoral experience. Laboratory of Molecular Growth Regulation (OE-39), NICHD, Building 6, Room 416.

Molecular Biology and Immunology of Cancer **Carter Van Waes, MD, PhD**

The molecular biology of squamous cell carcinoma of the head and neck, and the immune response to this disease, are currently being investigated. Both basic and clinical research studies are directed toward development of experimental immune and gene therapy to be used in combination with surgery. Opportunities exist for basic scientists and physicians wishing to combine clinical and research training. Experience in molecular biology is preferred. Head and Neck Surgery Branch (OE-39), NIDCD, Building 31, Room 3C11.

Structural Analysis of Kinase Activation Mechanisms **James Hurley, PhD**

The structural basis for regulation of protein kinases is being investigated using a combination of protein engineering, spectroscopic, and x-ray crystallographic techniques. Applicants must have a knowledge of protein structure; experience in protein purification, recombinant DNA techniques, spectroscopy of proteins, and/or protein x-ray crystallography; and no more than five years of previous postdoctoral experience. Laboratory of Molecular Biology (OE-39), NIDDK, Building 5, Room 435.

Molecular Membrane Biology **Bruce J. Baum, DMD, PhD**

The molecular mechanisms of membrane function related to exocrine fluid secretion are being investigated in an interactive program addressing problems in Ca^{2+} entry, ion transport, and water permeability. Studies include novel clinical applications to tissue repair (organ engineering) and gene therapeutics. Experience in fluorescence imaging, protein purification/reconstitution, and/or recombinant DNA techniques preferred. Applicants must have less

than five years postdoctoral experience. Clinical Investigations and Patient Care Branch (OE-39), NIDR, Building 10, Room 1N113.

Molecular Biology of Cardiac Diseases

Neal Epstein, MD and Lameh Franapazir, MD

Studies of the molecular biology and pathophysiology of hypertrophic cardiomyopathy are being integrated with the clinical evaluation and management of patients with the disease. Areas of investigation include mapping of other loci, expression of cloned mutant genes, and the study of the molecular correlates of therapeutic interventions and of variable disease expression. A strong background in molecular biology and less than five years of postdoctoral experience are required. Cardiology Branch (OE-39), NHLBI, Building 10, Room 7B141.

Regulation of Viral Gene Expression **Thomas Kristie, PhD**

Herpes simplex virus is being used in the analysis of the cellular and viral factors involved in the transcription of RNAPII genes. These studies focus on the molecular interactions involved in the regulated assembly of enhancer-promoter complexes and on the biochemical mechanisms of gene expression. Applicants should have experience in molecular biology and biochemistry. Laboratory of Viral Diseases (OE-39), NIAID, Building 4, Room 210.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (cu.nih.gov) or via modem (1,301-402-2221 or 1,800-358-2221). 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.

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

To Apply

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



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892

Equal Opportunity Employer

POSITIONS OPEN



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

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

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

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

NEUROSCIENCE FACULTY POSITION

The Program in Medical Sciences and the Department of Biological Sciences of the Florida State University invites applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Qualified individuals should have a Ph.D. or M.D. degree and postdoctoral training. The successful applicant is expected to establish and maintain an externally funded independent research program in the area of cellular or molecular neuroscience. Excellent departmental facilities and start-up funds are available. Candidates must be qualified to make major contributions to the teaching of all areas of medical physiology at a level appropriate to first-year medical students in the Program of Medical Sciences. Curriculum vitae, the names and addresses of three references, a brief description of research interests and future plans, and a summary of teaching experience should be sent by December 15, 1993, to: **Dr. Stuart E. Dryer, Chairman, Neuroscience Search Committee, Program of Medical Sciences, 104 SCN, Florida State University, Tallahassee, FL 32306-4051.** *The Florida State University is an Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.*

CHAIR AND PROFESSOR ENVIRONMENTAL TOXICOLOGY

Chair and Professor of Environmental Toxicology, and Environmental Chemist in the Agricultural Experiment Station, College of Agricultural and Environmental Sciences. Tenured, eleven-month, administrative, teaching, and research appointment. We are seeking an individual who has an internationally recognized research program in the field of environmental chemistry and toxicology; demonstrated leadership and administrative skills and enthusiasm for administering departmental programs. The incumbent is expected to teach a core course in the toxicology curriculum, and to advise and supervise undergraduate students. This is an outstanding opportunity for that person who wishes to provide leadership in the expected future growth of the department, recruiting new faculty members, and developing cooperative interdisciplinary programs in toxicology on the UC Davis Campus. Send résumé, publication list, short statement of administrative, research and teaching interests, and names and addresses of three references to: **Dr. Fumio Matsumura, Recruitment Committee, Department of Environmental Toxicology, University of California, Davis, CA 95616-8588.** The position will remain open until filled; to assure consideration, applicants should apply by December 31, 1993. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

PRODUCT MANAGER BIOMEDICAL INSTRUMENTS

Exceptional opportunity for marketing-oriented individual with strong biomedical/physiology background. Duties include: full marketing and sales responsibilities, and new product development. Strong writing skills and computer literacy required. Chicago suburban area. Some travel. Please submit curriculum vitae with salary requirements to: **Autogenic Systems, 620 Wheat Lane, Wood Dale, IL 60191.**

POSITIONS OPEN

ASSISTANT PROFESSOR Wildlife, Waterfowl/Wetlands Ecology. Tenure-track position in the Wildlife Department. Requires a Ph.D. with expertise in wildlife management. Candidate must demonstrate background in waterfowl/wetland ecology, wildlife management techniques, and research experience in waterfowl/wetland ecology. Instructional duties to include courses in: waterfowl management, wetland habitats, wildlife techniques, as well as other assigned courses. University teaching experience is preferred. The position begins fall 1994. Submit curriculum vitae (including reprints), transcripts of academic work, 3 letters of recommendation, and other pertinent materials to: **David W. Kitchen, Chair, Department of Wildlife, Humboldt State University, Arcata, CA 95521. Telephone: (707) 826-3953.** Closing date is November 30, 1993, or until appropriate candidate is found. *Humboldt State University is an Equal Opportunity/Affirmative Action/Title IX Employer.*

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology, **Midwestern University** invites applications for a new tenure-track faculty position at the rank of assistant professor to start in the summer of 1994. Applicants must have a Ph.D. or equivalent, a minimum of two years of postdoctoral experience and the ability to teach human physiology to medical students, pharmacy students and students in the allied health professions. It is expected that the successful candidate will develop a vigorous, independent research program capable of attracting extramural funding, preferably in an area that complements ongoing programs in cardiovascular, diabetes and vascular smooth muscle research. Interested applicants should send curriculum vitae, reprints of representative publications, a synopsis of research interests and future plans, and the names of three references to: **Stephen J. Kopp, Ph.D., Chairman, Department of Physiology, Midwestern University, 555 31st Street, Downers Grove, IL 60515.** *Affirmative Action/Equal Opportunity Employer.*

CHAIR

**Department of Microbiology and Immunology
University of Miami School of Medicine**

Applications are invited for the position of Professor and Chair of the Department of Microbiology and Immunology. The position is available immediately and the University welcomes applications from qualified candidates in any of the broad areas of Microbiology and Immunology. The successful candidate should have a strong record of accomplishment in research and teaching and is expected to provide intellectual and administrative leadership for a dynamic department. Currently the department has 25 faculty, with diverse research interests in immunology, molecular pathogenesis and virology and offers the B.S. in Microbiology and Ph.D. in Microbiology and Immunology. Teaching responsibilities include 200 undergraduate majors, first- and second-year medical student and 40 graduate students. Send curriculum vitae, statements of administrative philosophy and goals, and names and addresses of five references to: **Dr. Azorides Morales, Chairman, Search Committee, Sylvester Comprehensive Cancer Center, University of Miami School of Medicine, 1475 N.W. 12th Avenue (D-72), Miami, FL 33136.** Evaluation of applications will begin October 15, 1993. *The University of Miami is an Affirmative Action/Equal Opportunity Employer.*

SENIOR PROGRAM OFFICER MARINE CONSERVATION

World Wildlife Fund-United States (WWF-US), seeks a Senior Program Officer for its U.S. Land and Wildlife Program. The Senior Program Officer will focus on planning, developing, and implementing the marine conservation policy work with an emphasis on conservation of marine fisheries. Qualified candidates will be technically proficient in marine conservation policy and possess either a law degree with a natural resources focus, or a Ph.D. or Master's degree in marine policy, marine resources management, environmental studies, natural resources or a related field. Five years of experience in marine conservation policy, fisheries management, or marine resources management is required. Candidates should direct, by mail, a cover letter and résumé to: **World Wildlife Fund, Attention: Human Resources Department 311F, 1250 24th Street, N.W., Washington, DC 20037, or by FAX: (202) 293-9211.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

PHYSIOLOGIST: teaching-research position, **ASSISTANT PROFESSOR.** Teaching expertise in anatomy or histology and physiology; postdoctoral experience; and a fundable research program related to signal transduction, endocrinology and/or neurophysiology at the cellular or molecular level preferred. Request application packet from: **John D. Bell, Department of Zoology, Brigham Young University, P.O. Box 25230, Provo, UT 84602.**

EXECUTIVE DIRECTOR BOTANICAL GARDENS

The Marie Selby Botanical Gardens, Sarasota, Florida, seeks qualified applicants capable of managing and further developing an established botanical garden specializing in tropical botany, particularly epiphytes. Programs include education, display, research and conservation. Financial experience is necessary to direct a two million dollar budget. Ability to lead fund raising is essential. Applications will be accepted through December 31, 1993. Send curriculum vitae or inquiry to: **Mr. William F. Clendenin, Chairman, Search Committee, 1752 North Drive, Sarasota, FL 34239.** *An Equal Opportunity Employer.*

Organization for Tropical Studies (OTS) La Selva Biological Station Puerto Viejo de Sarapiquí, Costa Rica

The position of **STATION DIRECTOR** is open effective February 1994, or as soon thereafter as possible. OTS is seeking a bilingual Ph.D. with: (1) active research interests in tropical biology who can take advantage of the lowland rainforest ecosystem; (2) administrative experience/inclinations to oversee operation of a 40-person staff, research and housing to accommodate 75 or so persons day-in and day-out, and 1536 hectares of primary and disturbed forests and otherwise altered areas used in manipulative research; and (3) writing skills and leadership qualities to guide one of the world's premier field stations into the 21st century.

Additional information is available on request. Applications must include curriculum vitae, a statement addressing special qualifications for the position, and a list of five references (with addresses and telephone numbers). The application deadline is December 10, 1993. Contact: **Dr. Donald E. Stone, OTS, c/o Duke University, Box 90630, Durham, NC 27708-0630, USA. FAX: (919) 684-5661.**

FACULTY POSITION PROKARYOTIC GENETICS DEPARTMENT OF MOLECULAR BIOLOGY PRINCETON UNIVERSITY

The Department of Molecular Biology at Princeton University invites applications for a junior position in bacterial genetics. Exceptional senior-level scientists may also be considered. Candidates must have a Ph.D. degree and documented expertise in prokaryotic molecular biology and genetics. The position is open to candidates in all fields of research.

Qualified applicants should send curriculum vitae, a summary of research interests, and the names of at least three references to:

**Genetics Search Committee
Department of Molecular Biology
Princeton University
Princeton, NJ 08544**

Application deadline: December 1, 1993.
Princeton University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS AVAILABLE: New tenure-track positions available in the Department of Biochemistry during 1994-95. Minimum qualifications include a Ph.D. or M.D. degree, 3 to 4 years of postdoctoral experience, evidence of significant research accomplishments and the ability to attract extramural funding. Preference will be given to applicants who can interact with existing faculty at UT, Memphis, especially in neurochemistry, eukaryotic molecular biology and signal transduction in neurobiological systems. Applicants should send curriculum vitae and three letters of reference to: **Dr. John Fain, Department of Biochemistry, University of Tennessee; Memphis, TN 38163.** *The University of Tennessee is an Equal Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Women and minorities encouraged to apply.*

Principal Scientist Bone Metabolism and Osteoporosis

Wyeth-Ayerst Research, a major division of American Home Products Corporation, currently has an opportunity available at our pharmaceutical research facility in Radnor, Pennsylvania.

The successful candidate will participate in developing novel molecular targets for treatment and prevention of osteoporosis. Requirements include a Ph.D. in Molecular Biology or Cellular Biology and a minimum of 5 years experience, which must include molecular biology and demonstrated expertise in Bone Biology.

Please send your resume with salary requirements to: **Wyeth-Ayerst Research,**
Position #S-100-S, P.O. Box 8299,
Philadelphia, PA 19101. Equal
Opportunity Employer. M F D V.



Leading The Way for a Healthier World

National Institutes of Health
Laboratory of Viral Diseases

POSTDOCTORAL POSITION

Regulation of RNAPII Directed Transcription

Herpes simplex virus is used as a model system for the analysis of cellular and viral factors involved in the transcription of RNAPII genes. These studies focus upon the DNA-protein and protein-protein interactions which mediate the assembly of multiprotein enhancer-promoter complexes and upon the biochemical mechanisms of gene transcription.

Applicants should have experience in molecular biology, molecular virology and/or protein biochemistry. Two positions are available immediately. To apply, forward curriculum vitae and names of three references to:

Thomas M. Kristie, Ph.D.
Laboratory of Viral Diseases,
NIAID
National Institutes of Health
Building 4, Room 229
9000 Rockville Pike
Bethesda, Maryland 20892
FAX: 301-480-1147



NIH is an Equal Opportunity Employer



Roche

**Our Preclinical CNS
Research Department in
Basel is looking for**

Three Postdoctoral Fellows

—One position is available in the area of **molecular and cellular neurobiology**. Candidates should have a Ph.D. or M.D. with a strong background in molecular biology, mammalian cell culture and biochemistry. Previous experience involving receptor cloning and expression or signal transduction mechanisms is preferred.

—A further two positions are available in the area of **receptor pharmacology** (biochemical pharmacology). The successful candidates will work with a team of molecular biologists studying the pharmacology of novel 5HT receptor subtypes or metabotropic glutamate receptors. A strong background in receptor pharmacology, including signal transduction, is preferred.

If you are interested in one of these positions, please send your handwritten letter of application together with references and your curriculum vitae to Mrs. M. Waespe of our Personnel Department, quoting reference Science 141/93/Wä.
F.Hoffmann-La Roche Ltd, CH-4002 Basel

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION

Biotechnology and Biochemical Engineering Program

Thayer School of Engineering, Dartmouth College

The Thayer School of Engineering, Dartmouth College, is committed to building an outstanding program in Biotechnology and Biochemical Engineering. The interdisciplinary character of the engineering school provides unusual support for activities in the biotechnology area, which is enhanced by collaborations with the medical school and the departments of biology and chemistry.

A candidate is sought to join a group of three faculty with primary interests in biochemical engineering. We seek an individual with motivation and skills that foster intellectual pioneering in both research and teaching, and also show potential for complementing the distinctive character of the Thayer School. Research interests are desired that integrate engineering and life science perspectives in a way that allows engineers to play a central role in research-driven innovation and/or elucidation of widely applicable fundamentals. Desired research foci include, but are not limited to, those with relevance to the biopharmaceutical industry. Both junior and senior candidates will be considered.

A cover letter, curriculum vitae, and the names of three references should be sent to: **Dr. Lee Lynd, Biotechnology and Biochemical Engineering Program, Thayer School of Engineering, Dartmouth College, Hanover, NH 03755; Telephone: (603-646-2231).** Review of applications will begin in January 1994; interested candidates planning to attend the fall meeting of the AIChE are encouraged to contact us in time to arrange a meeting. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

ANATOMY HALF-TIME FACULTY POSITION FOR PHYSICAL ANTHROPOLOGIST C.W.R.U. School of Medicine

Primary responsibilities include teaching Gross Anatomy in the Medical, Graduate and Undergraduate curricula and the establishment of an original and independent research program. Requirements are an earned Doctorate in Physical Anthropology and at least 2 years of postdoctoral experience in a research program. Interested applicants should send curriculum vitae, résumé of research activities and a list of references to: **Search Committee, Department of Anatomy, C.W.R.U., 10900 Euclid Avenue, Cleveland, OH 44106-4930.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

The Infectious Disease Unit at the Massachusetts General Hospital, a Harvard Medical School affiliate, is seeking applications from physicians for a **JUNIOR FACULTY POSITION** that will focus an 80% to 90% research effort on the molecular pathogenesis of infectious diseases. Applicants should have significant postdoctoral research experience and publications, with the ability to establish an independent research program. Candidates should be board eligible or certified in Infectious Diseases. *Applications from women and members of minority groups are particularly encouraged.* Interested individuals should forward curriculum vitae, a one-page statement of research interests, and the names and addresses of three references to: **Dr. Stephen Calderwood, Infectious Disease Unit, Massachusetts General Hospital, Boston, MA 02114,** prior to November 30, 1993. *The Massachusetts General Hospital is an Affirmative Action and Equal Opportunity Employer.*

POSTDOCTORAL POSITION/ALZHEIMER'S DISEASE RESEARCH. Studies involve kinetics of amyloid aggregation, neuritic plaque formation, and abnormal processing of substrates by various brain enzymes involved in Alzheimer's Disease as well as in other neurodegenerative disorders. Qualified candidates should be highly motivated, possess a strong background in enzymology, fast reaction techniques, CD and fluorescence. Salary commensurate with experience. For prompt consideration forward curriculum vitae, a brief letter outlining goals for postdoctoral research and three letters of reference to: **Prof. Y. Pocker, University of Washington, Department of Chemistry BG-10, Seattle, WA 98195.** *The UW is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

LECTURER IN BIOLOGICAL SCIENCES. The Department of Biological Sciences, University of Nevada, Las Vegas, seeks applicants for a non-tenure-track faculty position as Lecturer of Biological Sciences (P89061). Responsibilities will include lecture in, and coordination of laboratories for a first-semester, General Biology course for majors. Experience in, and commitment to, undergraduate biology instruction is expected. Minimum of a Master's degree in a life science is required. Salary is competitive; position available as early as January 15, 1994, or as late as August 15, 1994. Send curriculum vitae, letter describing teaching philosophy and three letters of recommendation to: **Department of Biological Sciences, c/o Warren Burggren, University of Nevada, Las Vegas, Box 454004, Las Vegas, NV 89154-4004; FAX: 702-895-3956.** Application must be received no later than December 1, 1993. *UNLV is an Equal Opportunity/Affirmative Action Employer and employs only U.S. citizens and aliens authorized to work in the United States.*

POSTDOCTORAL POSITIONS

Positions are available to study the temporal-spatial dynamics of macromolecules, ions and metabolites in living mouse cells using fluorescence-based imaging methods. Opportunities for: (1) developing new fluorescence-based reagents to sense chemical and molecular changes using a combination of organic chemistry, biochemistry and molecular biology; and (2) applying existing and new reagents to study cell-cycle dependent chemical and molecular dynamics involved in cell locomotion, cell shape and cell division using light microscope imaging tools. A background in molecular biology, biochemistry or organic chemistry is optimal. Send curriculum vitae and the names of three references to: **D. Lansing Taylor, Director, Center for Light Microscope Imaging and Biotechnology, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS

The Dana-Farber Cancer Institute seeks to fill postdoctoral research positions to study molecular mechanisms that regulate the development and function of T-cell subsets. Background in cellular immunology and/or molecular biology essential. Experience in production/analysis of animals carrying transgene or targeted mutations desirable. A joint appointment will be held in an appropriate department of the Harvard Medical School. Send curriculum vitae and 3 references to: **Dr. Harvey Cantor, Laboratory of Immunopathology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115 USA.**

NEUROSCIENCE Ph.D. at the University of Michigan, Section of Emergency Medicine. Active areas of research in brain injury, shock, and focal/global cerebral ischemia. Collaboration/joint appointments with basic science departments available and encouraged. Please send curriculum vitae to: **William G. Barsan, M.D., University of Michigan Medical Center, Emergency Department, Room UH B1C255, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0014.** Telephone: 313-936-6020.

POSTDOCTORAL POSITIONS available to study genes that determine the yeast replicative life span, their human homologs, and age-responsive promoter elements (*Amer. Soc. for Microbiology News* 59:172). Experience in molecular techniques important. Send curriculum vitae with bibliography and names and telephone numbers of three references to: **Dr. S. Michal Jazwinski, Department of Biochemistry, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112.** *LSUMC is an Equal Opportunity/Affirmative Action Employer.*

CITY OF HOPE NATIONAL MEDICAL CENTER

A **POSTDOCTORAL POSITION** is immediately available at the City of Hope to study human gene therapy applications using retrovirus or adenovirus as vectors. Candidates should have either an M.D. or Ph.D. degree and a background in cellular and molecular biology. The term of the appointment is two years. Applications including full curriculum vitae, together with names and telephone numbers of three references, should be sent to: **Dr. Jiing-Kuan Yee, Division of Pediatrics, 1500 East Duarte Road, Duarte, CA 91010.**

POSITIONS OPEN

POSTDOCTORAL POSITION

A postdoctoral position is available immediately for a highly motivated scientist to study plant molecular biology and virology. Candidates should possess excellent abilities in recombinant DNA manipulations. Previous experience with plant transformation, regeneration, screening and virology are desirable but not required; those without plant experience are encouraged to apply. Send curriculum vitae and names of three references to: **Drs. P. Berger or D. Guerra, Division of Plant Pathology, Room 242, Agricultural Science, University of Idaho, Moscow, ID 83844-2339.** Telephone: 208-885-6319 (pberger@marvin.ag.uidaho.edu). *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Available immediately at Dana-Farber Cancer Institute. Project involves investigating the interaction of retroviruses with cells and host organisms, especially the effect of immunosuppressive lentiviruses on the developing immune system. Predoctoral experience in virology and/or immunology essential. Send curriculum vitae and names of 3 references: **Dr. Ruth M. Ruprecht, Chief, Laboratory of Viral Pathogenesis, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** Dana-Farber Cancer Institute is an affiliate of Harvard Medical School; *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION AVAILABLE to candidates interested in cardiovascular pharmacology, physiology and signal transduction. Area of research: normal and pathophysiological roles of nitric oxide and mediators of inflammation (e.g., histamine) and their biochemical mechanisms of action. Whole animal, organ perfusion and tissue culture models are used. Send curriculum vitae and references to: **Dr. Roberto Levi, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** *An Equal Opportunity Employer/Affirmative Action M/F/V.*

POSTDOCTORAL RESEARCH POSITION available immediately to study the structure and regulation of myotendinous junctions. Particular emphasis is placed on growth factor-mediated control of junction structure during muscle development and adaptation. Technical approaches used include cell culture, immunocytochemistry, protein biochemistry, electron microscopy, Western and Northern blots. Send curriculum vitae and three letters of reference to: **Dr. James G. Tidball, Department of Physiological Science, University of California, Los Angeles, CA 90024-1527.**

Two **POSTDOCTORAL OR JUNIOR FACULTY POSITIONS** available in the Department of Anesthesiology, Harvard Medical School. Investigative areas include: (1) Skeletal neuromuscular biology with emphasis on ligand gated and/or voltage gated channel alterations in critical illness, including burn trauma/sepsis. (2) Adrenoceptor control in critical illness including burn trauma/sepsis. Outstanding individuals with strong research experience in the areas of gene regulation, signal transduction mechanisms, molecular biology and/or biochemistry are sought. Collaborative interactions in basic science and clinical areas will include teaching and directing one or two trainee physicians or technicians. Forward curriculum vitae, names, addresses and telephone numbers of three references to: **J. A. Jeevendra Martyn, M.D., Professor of Anaesthesiology/Harvard Medical School, Director, Clinical Pharmacology Laboratory, Department of Anesthesia, Massachusetts General Hospital, Boston, MA 02114.**

The Beckman Laser Institute and Medical Clinic, University of California, Irvine, is seeking to fill **POSTDOCTORAL POSITIONS** (Ph.D. or M.D./Ph.D.) in the areas of photochemistry, biophysics, cell biology, oncology, cardiology, and surgery. Candidates should have interest or experience in working with lasers. Please reply to:

**Michael W. Berns, Ph.D.
Beckman Laser Institute & Medical Clinic
University of California, Irvine
1002 Health Sciences Road East
Irvine, CA 92715**

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

UC DAVIS

DIVISION OF BIOLOGICAL SCIENCES

FIVE FACULTY POSITIONS IN BIOLOGY

The **Division of Biological Sciences, University of California, Davis**, announces the availability of five (5) faculty positions to be filled on or after July 1, 1994. The positions represent the first phase of new recruitments for the recently reorganized Division of Biological Sciences. All positions are 11-month (full-year), tenure-track faculty positions at the rank of **Assistant Professor** and include an appointment in the Agricultural Experiment Station. Appointees will be expected to develop and sustain a vigorous program of research and graduate training. In addition, appointees will teach in appropriate undergraduate and graduate programs.

The Division of Biological Sciences is an inter-college unit comprising over 100 faculty positions. As of July 1, 1993, the Division was reorganized into five new Sections. These recruitments represent the first phase of the planned growth of each Section. The Division's research and training facilities are located in three modern laboratory buildings encompassing 150,000 square feet; a new 70,000 square-foot research laboratory building will be completed in 1996. In addition to its responsibilities for research and graduate education, the Division offers eight undergraduate major programs enrolling 3,100 students in the College of Agricultural and Environmental Sciences and the College of Letters and Science. The Division also collaborates with the Schools of Medicine and Veterinary Medicine in research and teaching activities.

Applications and nominations are invited for each of the positions. Positions are open until filled, but **all application materials (including three letters of recommendation) should be received by November 30, 1993 to be assured of full consideration.** For more detailed information about a specific position, write to the Section Chairs listed below or see the individual announcement of the position in the next issue of *Science*. More general inquiries may be directed to Mark McNamee, Interim Dean, Division of Biological Sciences, University of California, Davis, CA 95616.

Section of Evolution and Ecology. Applications are solicited from individuals whose areas of interest include: physiological ecology, behavioral ecology, population ecology, community/food-web ecology, avian ecology, mammalian ecology, or plant ecology. Contact: Professor Tom Schoener, Chair.

Section of Microbiology. Applications are solicited from individuals whose areas of interest include modern molecular, biochemical, or genetic aspects of microbial physiology. Contact: Professor Stephen Kowalczykowski, Chair.

Section of Molecular and Cellular Biology. Applications are solicited from individuals whose areas of interest include: structure, function, or regulation of supramolecular complexes in a cellular or developmental context. Contact: Professor Carl Schmid, Chair.

Section of Neurobiology, Physiology, and Behavior. Applications are solicited from individuals whose areas of interest include physiological mechanisms underlying behavior. Contact: Professor Barbara Horwitz, Chair.

Section of Plant Biology. Applications are solicited from individuals whose areas of interest include plant developmental biology using the approaches of developmental genetics to investigate problems in morphogenesis. Contact: Professor Robert Percy, Chair.

The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation.

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

Bristol-Myers Squibb in Syracuse, New York, has the following opportunities available:

Genetic Engineering & Biological Process Development Department

Scientist II/Senior Scientist I

(Position #BC064-93) Responsible for mammalian gene expression strategies and improving cell line titers for important biotherapeutic monoclonal antibodies, adhesion molecules, immunoregulators, etc. We seek a Ph.D. with postdoctoral experience in molecular biology including experience in generating high-producing mammalian cell lines by gene expression in strategies. Industrial experience in the optimization of biotherapeutics preferred.

Associate Scientists

(Position #BC061-93(2)) Two positions available with responsibility for supporting the development of improved cell lines by clonal selection and adaptation and will include optimizing mammalian cell culture media. We seek a candidate with a B.S./M.S. degree in cell biology or biology and experience in the cultivation, manipulation and analysis of mammalian cells.

(Position #BC062-93) Responsible for supporting the development of improved cell lines by genetic engineering strategies and will include gene expression in mammalian hosts. We seek a candidate with a B.S. or M.S. degree in molecular biology or biology and experience in vector construction, DNA hybridization, cell culture techniques and protein analysis.

Biologics Pilot Plant Development Engineer

(Position #BC-065-93) This is your opportunity to join a company currently applying hybridoma and cell culture technology to develop therapeutic products for anti-tumor as well as autoimmune disease treatments. Responsible for the application of engineering knowledge to cell culture process design and development including developing procedures for cell culture media and process optimization. Candidate must have an M.S. in Chemical/Biochemical Engineering with 5 years industrial or related experience or Ph.D. with 2 years industrial or related experience. Familiarity with immobilized cell culture technology and prior working experience in greater than 10 liter scale mammalian cell culture are desired. Prior experience in cGMP operation is preferred.

We offer an excellent salary, comprehensive benefits and a working environment conducive to professional growth. For confidential consideration, forward your resume with salary requirements, indicating Position #, to: **Manager Human Resources, BRISTOL-MYERS SQUIBB COMPANY, P.O. Box 4755, Syracuse, NY 13221-4755.** Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE MOLECULAR BIOLOGY & GENETICS

Several postdoctoral/research associate positions are available for well-qualified individuals to become members of a productive interdisciplinary research team. The successful candidate(s) will utilize either the lysyl oxidase or protamine gene system to study growth, development and differentiation. Self-motivated individuals trained in molecular biology and/or biochemistry interested in mechanisms of gene potentiation are encouraged to apply.

Interested individuals should forward curriculum vitae and three letters of reference to: **Dr. Stephen A. Krawetz, Departments of Molecular Biology and Genetics and Ob./Gyn., Wayne State University School of Medicine, 253 C.S. Mott Center for Human Growth and Development, 275 East Hancock, Detroit, MI 48201.**

WSU is an Equal Opportunity Employer.

POSTDOCTORAL POSITION HUMAN GENOME RESEARCH

Position available, as part of a new Program in Human Genetics, to study the molecular basis of velocardio-facial syndrome, a developmental abnormality associated with deletions on human chromosome 22. Approaches involve physical mapping and gene isolation and analysis. Other projects include gene isolation from chromosomal translocations involved in leukemias. Send or FAX curriculum vitae and addresses, telephone and FAX numbers of three references to: **Dr. Arthur Skoultschi, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: (718) 829-7619. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS PROSTATE CARCINOGENESIS

Positions are available for recent Ph.D. or M.D. graduates interested in studying prostate carcinogenesis. Funded projects involve the cellular and molecular biology of cellular adhesion, extracellular matrix proteins, and metalloproteinases. Experience in molecular biology or protein biochemistry is desired. Newly remodeled laboratories are available for research with opportunities with the Department of Pathology and the Division of Cancer Biology in the Department of Radiation Oncology. The position is available immediately. Review of applications will begin on October 22, 1993, and will continue until the position is filled. Submit curriculum vitae and names of three references to: **Ray B. Nagle, M.D., Ph.D., University of Arizona Health Sciences Center, Department of Pathology, 1501 North Campbell, Tucson, AZ 85724. Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION

Panlabs, Inc., a biotech company located northeast of Seattle, Washington, is inviting a recent Ph.D. to join a 3-year NIH-funded project to study the role of growth factors in the development of human benign prostatic hyperplasia (BPHG). An *in vitro* model has been developed to analyze the growth factor interactions between epithelial-stromal cells. Qualified candidate will have expertise in molecular biology and the purification of growth factors. Send or FAX résumé/curriculum vitae and names of three references to: **Panlabs, Inc., (Position #93-50), 11804 North Creek Parkway South, Bothell, WA 98011; FAX: 206-487-3787.**

POSTDOCTORAL POSITION: U.S. Department of Agriculture, Agricultural Research Service (ARS), Roman L. Hruska U.S. Meat Animal Research Center, Clay Center, Nebraska, has a Postdoctoral Research Associate position available immediately. Incumbent will develop automated system for building real-time physically anchored genetic linkage maps from a growing database of marker genotypes and physical mapping data. Exploration of alternative technologies will be encouraged. Individuals with experience and interest in computational aspects of genetics are encouraged to apply. Two-year appointment with benefits. Minimum starting salary \$33,623. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **John W. Keele, USDA-ARS, Roman L. Hruska U.S. Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933-0166. USDA-ARS is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

A POSTDOCTORAL POSITION to study pharmacokinetics and mechanisms of drug activity against *Toxoplasma gondii* is available in our Department of Immunology and Infectious Diseases. Required is a doctorate in Pharmacology, Pharmacokinetics, Biopharmaceutics or Pharmacodynamics. Experience in pharmacokinetic studies, in studies to determine bioavailability/bioequivalence, in the use of statistical analysis to evaluate pharmacokinetic observations, as well as in studies on mechanisms of drug activity in mammals will be an asset. The successful candidate will be responsible for the organization, execution, and analysis of pharmacokinetic studies for a contract research testing facility. Send curriculum vitae to: **K. Roberts, Research Institute, Palo Alto Medical Foundation, 860 Bryant Street, Palo Alto, CA 94301. We are an Equal Employment Opportunity Employer.**

POSTDOCTORAL POSITION—To participate in studies of the molecular basis of cell division and chromosome segregation in *E. coli*. The research involves the combined use of molecular genetics and biochemistry to study the mechanisms responsible for the division process, for the proper placement of the cell division site, and for the coordination of the division process with the partition of daughter chromosomes into progeny cells. Send curriculum vitae, brief description of prior research experience, and the names of several references to: **Dr. L. Rothfield, University of Connecticut Health Center, Farmington, CT 06032.**

An Affirmative Action/Equal Opportunity Employer, M/F/PwD/V.

POSTDOCTORAL POSITION IN PROTEIN NMR SPECTROSCOPY available immediately to study structure-function relationships in pumpkin seed protein inhibitors of the blood coagulation protein, Factor XIIa. A state-of-the-art 500 MHz Varian Unity Plus NMR spectrometer will be available. Persons experienced in multi-dimensional NMR may apply to: **Dr. R. Krishnamoorthi, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506** with curriculum vitae and names of two references. *Kansas State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS IN CARDIOVASCULAR BIOLOGY. Five positions are available in independent but interactive laboratories within a multidisciplinary program offering experience in the cell and molecular biology, biochemistry and physiology of cardiovascular function and related disease processes. Research areas of investigators currently recruiting include: (1) Effects of diabetic hyperglycemia on endothelial cell function—**Dr. Stuart Williams**; (2) Regulation of expression and function of gap junction proteins and channels by cells of the cardiovascular system—**Dr. Janis Burt**; (3) Molecular biology of G-protein coupled receptors—**Dr. John Regan**; (4) Effects of advanced glycation endproducts and their inhibition on transport properties of basement membrane and endothelium—**Dr. Murray Katz**; and (5) Regulation of cadherin expression in endothelial and smooth muscle cells during embryogenesis and vascular remodeling—**Dr. Ron Heimark**. Start dates for position 1 to 3 are between June 1, 1994, and May 1, 1995, for position 4 prior to May 1, 1994, and for position 5 negotiable. Salaries are negotiable and based on prior experience. Eligibility: U.S. citizens or permanent residents with a Ph.D., M.D. or equivalent. Applications accepted until positions are filled. Send curriculum vitae and three letters of reference to the investigator of interest c/o:

**Cardiovascular Biology Program
College of Medicine
University of Arizona
Tucson, AZ 85724**

The University of Arizona is an Equal Opportunity/Affirmative Action Employer and applications from females and minority members are strongly encouraged.

POSTDOCTORAL POSITION available immediately to study avian evolutionary biology within a phylogenetic context. Previous ornithological research experience is desirable but not essential. Send curriculum vitae, short statement of research interests, and the names and telephone numbers of three references to: **Scott M. Lanyon, Center for Evolutionary and Environmental Biology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL/TECHNICAL POSITION REAL-TIME CALCIUM IMAGING

A postdoctoral/technical position is available in the Department of Anatomy and the LSU Neuroscience Center to support a core facility for real-time calcium imaging. Applicants must have experience with imaging as well as a technical background in computer hardware/software and electronics. An academic interest in calcium channels and/or intracellular calcium is preferred. Salary levels are competitive. Send curriculum vitae and names of three references to: **Dr. R. Ranney Mize, Department of Anatomy, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS AVAILABLE. Postdoctoral through assistant professor level. Gene expression and structure in colon cell differentiation and transformation. Forward résumé and names of references to: **Leonard H. Augenlicht, Ph.D., Professor and Director, Molecular Oncology Program, Albert Einstein Cancer Center, Montefiore and Albert Einstein Medical Centers, 111 East 210th Street, Bronx, NY 10467.**

Two **POSTDOCTORAL POSITIONS** are available for studies exploring the physiology, cell and molecular biology and biochemistry of the urinary tract. These positions are supported by an NIH training grant in Urology. One position is open immediately, the second on July 1, 1994. Send curriculum vitae, brief summary of research interests, and the names of three references to: **Dr. Robert M. Levin, Director of Basic Research, Division of Urology, Hospital of the University of Pennsylvania, 3005 Ravdin Courtyard, 3400 Spruce Street, Philadelphia, PA 19104. NIH Training Grants require U.S. citizenship or permanent residency. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP

Applications are invited for the E. E. Selkurt Postdoctoral Fellowship in the Department of Physiology and Biophysics, Indiana University School of Medicine to provide 2 years of support for a promising scientist with a Ph.D. or M.D. degree. Selection will be based on parallel interests with one of the following faculty:

Dr. H. G. Bohlen—Microvascular function in normals and diabetics.

Dr. P. J. Gallagher—Molecular mechanisms of smooth muscle growth.

Dr. S. Gunst—Airway smooth muscle contractile mechanisms.

Dr. C. S. Hui—Excitation-contraction coupling in skeletal muscle.

Dr. S. A. Kempson—Cellular regulation of membrane transport.

Send applications (curriculum vitae, brief outline of proposed research, and names of two references) to: **Selkurt Fellowship Committee, 635 Barnhill Drive, MS 374, Indianapolis, IN 46202. Deadline: November 12, 1993.**

Indiana University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP IN REPRODUCTIVE BIOLOGY

Position available now to study the regulation of sperm maturation and sperm-egg interaction. Experience in molecular biology and cell biology is preferred. Send curriculum vitae, statement of research interests, and names with telephone numbers of three references to: **Dr. Marie-Claire Orgebin-Crist, Center for Reproductive Biology Research, Vanderbilt School of Medicine, Room D-2303 MCN, Nashville, TN 37232-2633. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOW needed to perform studies on the prohormone convertases responsible for generation of peptide hormones/neuropeptides (*JBC* 268: 5615, 1993). Position can involve biochemistry (EPIC of recombinant enzymes and inhibitors), cell biology (biosynthetic studies of enzymes), and/or molecular biology (site-directed mutagenesis). Prefer recent Ph.D. with a strong interest in neuroendocrine cell biology/biochemistry. Send curriculum vitae, references to: **Iris Lindberg, Department of Biochemistry and Molecular Biology, L.S.U.M.C., 1901 Perdido Street, New Orleans, LA 70112.**

The Global Environment: Invitation for RITE's Research Proposals

Research Institute of Innovative Technology for the Earth (RITE) is inviting basic research proposals concerning with the environmental problems. Also, research proposals which are deemed to contribute significantly to the resolution of global environmental problems will be supported by RITE in the form of commissions.

1. Invited Research Category:

Basic research aimed at the development of innovative technologies which will contribute to the solution of the global environmental problems.

2. Invited Research Themes:

[A] Research concerning greenhouse gases, such as carbon dioxide and methane gas which are considered among the main causes of global warming, on the following themes:

- 1) Efficient separation, recovery, disposal, re-use and so on of the greenhouse gases.
- 2) Innovative process technologies which limit the greenhouse gas generation.
- 3) Research concerning enhancement of CO₂ sinks (e.g. ocean sinks underground storage and restoration through biotechnology).

[B] Research for other technologies concerning the environmental problems on the following themes:

- 1) Control of generating and widespread release of chemical substances, apart from the greenhouse gases mentioned in [A] above, which are seriously detrimental to the environment, or prevention of those substances.
- 2) Substitutes for the chemical substances mentioned above.
- 3) Recycle and effective utilization of materials.

3. The Number of Proposals to be Accepted:

The number of the proposals to be accepted is determined after the budget has been confirmed. For FY 1993, 13 proposals were accepted newly.

4. Allowance for Commissioned Research:

Up to 10 million Japanese Yen will be allocated for each proposal; the entire cost of a project may not be covered by RITE. The allowance distributed for the proposals accepted in FY 1993 ranged from 5.0 million to 7.5 million Japanese Yen per project, with the average being 6.7 million Japanese Yen.

5. Closing Date for the Submission of Proposals:

Proposals must be received by RITE no later than January 11, 1994.

6. Period of the Commissioned Research:

Accepted proposals will be for projects lasting a single year during the period approximately from June through August 1994 to March 1995. However, when the continuation of the project is deemed necessary, RITE may commission further research.

7. Qualified Research Participants:

Individuals or groups engaged in research activities at research institutions etc. are eligible. The applicants' citizenship or proposed site for the research will not be considered as determinants in selection.

8. Application Procedure:

Applicants must contact the secretariat at RITE (as below) for literature detailing documents to be submitted and designated formats thereof. Facsimile transmission is preferred for speed of communication. Please include relevant Tel. and Fax. numbers with requests.

The program is carried out on commission by the New Energy and Industrial Technology Development Organization (NEDO).

Please make a contact to:

Ms. Kaneko, Mr. Ishizu or Mr. Hirano
Research Proposal Reception Section
Research Planning Department
RITE

9-2 Kizugawadai Kizu-cho Soraku-gun

KYOTO, 619-02 JAPAN

TEL: 81-7747-5-5233

FAX: 81-7747-5-2314



Research Institute of Innovative
Technology for the Earth



Wayne State University

MOLECULAR AND CELLULAR BIOLOGY MOLECULAR MEDICINE AND GENETICS

ASSOCIATE AND FULL PROFESSOR - The new Center for Molecular Medicine and Genetics is expanding its research and training programs. Applications are invited for tenured/tenure-track faculty positions at the associate professor or full professor level. Excellent research laboratories and support facilities are located in the School of Medicine and in the Biological Sciences Building on the main campus of the University in proximity to one of the largest medical centers in the United States. Candidates should be established, independent investigators with outstanding research and training accomplishments and should have demonstrated ability to obtain extramural research funding. While all research areas will be considered, candidates with expertise in eukaryotic molecular, cellular, or developmental genetics, human genetic diseases or their animal models, human or model organism genome analysis, or gene therapy are especially encouraged to apply. Applicants should send complete *Curriculum Vitae*, a brief description of current and future research interests (3-4 pages), a bibliography and reprints of significant publications, and recommendations from at least three references by December 15, 1993, to:

Dr. Robert H. Rownd, Director
Center for Molecular Medicine and Genetics
Wayne State University School of Medicine
3216 Scott Hall
540 East Canfield
Detroit, MI 48201

Wayne State University is an equal opportunity/affirmative action employer and invites applications from all qualified individuals.

Health Scientist Administrator (HSA) GS-601-12/13/14

The National Institute of General Medical Sciences, National Institutes of Health, Bethesda, MD is seeking a HSA, responsible for managing the programming and evaluation of a portfolio of research and research training grants that support work in the fields of biological chemistry, particularly where the emphasis of research is on enzymology, lipid biochemistry, intermediary metabolism and bioenergetics. In addition, the incumbent provides scientific expertise in the above mentioned specialized areas and advises grantees and professional staff members regarding research aspects of grants within these areas of expertise and serves as a source of technical knowledge.

Applicants interested in applying must have a knowledge of biochemistry with specific expertise in at least one of these areas: lipid biochemistry, membrane biochemistry, biophysics, enzymology, intermediary metabolism or bioenergetics; ability to make critical judgements about the management and evaluation of scientific research; and ability to write about complex scientific topics for a varied audience.

For information regarding the qualifications and application requirements, please call the NIGMS Personnel Office (301) 594-7767. Announcement closes 11/08/93. U.S. Citizenship is required.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW

Position available for up to three years to study the role of neurotrophins/receptors in prostate neoplasia. Experience in molecular biology required. Salary commensurate with experience. Please send curriculum vitae and names of three references to: **Dr. Daniel Djakiew, Department of Cell Biology, Georgetown University Medical Center, 3900 Reservoir Road, N.W., Washington, DC 20007. Telephone: (202) 687-1203, FAX: (202) 687-1823.**

POSTDOCTORAL FELLOW NUTRIENT CYCLING

The Harvard Forest seeks a Postdoctoral Fellow to join a project examining influences of land-use history on soil nutrient cycling and forest composition and productivity. Opportunities will include process-level studies at the site level plus regional evaluations through GIS and modeling. Candidates should hold a Ph.D. in ecology, soil science, forestry, or related field. Experience with GIS and ecosystem models is desirable. The Harvard Forest is part of the NSF Long-Term Ecological Research (LTER) Program and a site for global change research supported by the DOE National Institute for Global Environmental Change (NIGEC). Send curriculum vitae and names and telephone numbers of three references by December 1, 1993, to: **Dr. Richard Boone, Harvard Forest, P.O. Box 68, Petersham, MA 01366; (Telephone: 508/724-3302).**

Harvard University is an Equal Opportunity Employer and applications from women and minorities are strongly encouraged.

Smithsonian Institution Fellowship Program

GRADUATE STUDENT, PREDOCTORAL, POSTDOCTORAL, AND SENIOR FELLOWSHIPS in animal behavior, ecology, and environmental science; including an emphasis on the tropics; Earth sciences and paleobiology; evolutionary and systematic biology; history of science and technology. Tenable in residence at the Smithsonian facilities. Stipends and tenure vary. **Deadline: January 15 annually. Contact: Office of Fellowships and Grants, 955 L'Enfant Plaza, Suite 7000, Desk N, Washington, D.C. 20560, (202) 287-3271.**

An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE DEPARTMENT OF OPHTHALMOLOGY

POSTDOCTORAL RESEARCH ASSOCIATE. The University of Nebraska Medical Center's Department of Ophthalmology is looking for a researcher with an interest in the factors that affect the successful outcome of glaucoma surgery and on the pathophysiology of optic nerve damage in glaucoma. Ph.D. in physiology or M.D. in ophthalmology is required. Prior experience in the area of eye research is preferred. Position available from November 1, 1993, through October 31, 1994. Salary \$16,000 plus benefits, 40 hours per week. Send curriculum vitae to: **Michael Yablonski, M.D., Ph.D., Professor & Chairman, Department of Ophthalmology, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-5540. Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available to study the structure/function of P-glycoprotein in multidrug-resistant cancer cells. Ph.D. in molecular biology or biochemistry required. Experience with recombinant DNA techniques and site-directed mutagenesis is desirable. Send curriculum vitae and names of three references to: **A. R. Safa, Ph.D., University of Chicago Medical Center, 5841 South Maryland Avenue, MC 2115, Chicago, IL 60637.**

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS

Positions are immediately available in NSI- and NIH-funded programs for training and research in functional analysis of developmentally or hormonally regulated promoters, and isolation of operative transcription factors. Applicants with Ph.D. experience in DNA and RNA techniques, or purification of low abundance proteins, are preferred. Send curriculum vitae and names of three references to: **Dr. Grace Jones, Molecular and Cell Biology Section, University of Kentucky, Lexington, KY 40506-0225. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH position available immediately at Shriners Hospital/Oregon Health Sciences University to continue studies of the regulation of cartilage-specific gene expression. Experience with DNA manipulation, mammalian cell transfection and gel shift/footprinting assays is desirable. Send curriculum vitae and names of three references to: **Dr. Kurt J. Doege, Research Unit, Shriners Hospital for Crippled Children, 3101 S.W. Sam Jackson Park Road, Portland, OR 97201.**

Shriners Hospital is an Equal Opportunity Employer that maintains a drug/alcohol-free workplace.

The Division of Cardiology and Department of Medicine at Cedars-Sinai Medical Center is looking to recruit an **M.D./Ph.D. SCIENTIST** with expertise in basic research in **VASCULAR BIOLOGY** (atherosclerosis/thrombosis/lipoprotein biology or gene therapy). The position will include an endowed, named Chair, generous laboratory space, state-of-the-art core facilities and substantial funding for at least 5 years. Contact: **Drs. P. K. Shah at (310) 855-4876 or Dr. James Fagin at (310) 855-4774; Cedars-Sinai Medical Center, Division of Cardiology, Room 5314, Cedars-Sinai Medical Center, Los Angeles, CA 90048.**

ASSOCIATE RESEARCH SCIENTIST: Columbia University, to study the cell biology of contact inhibition. Requirements: Ph.D. or M.D., and experience in protein purification and/or video microscopy. Send curriculum vitae and three references to: **Dr. Gregg Gundersen, Department of Anatomy/Cell Biology, Columbia University, 630 West 168th Street, New York, NY 10032. An Affirmative Action/Equal Opportunity Employer.**

TUMOR BIOLOGIST

Candidate must have a Ph.D. or equivalent degree with minimum of 5 years of postdoctoral work in the field of animal models of tumors. Scientific writing skill is advantageous. Salary \$50,000 to \$65,000 annually depending on previous experience. Send complete résumé and names of two references to: **Personnel Department, InfaZyme Pharmaceuticals Inc., Suite 800, 777 West Broadway, Vancouver, B.C. V5Z 4J7.**

ASSOCIATE RESEARCH SCIENTIST. Position is available for the management and operation of the PET machine and computer at Columbia Presbyterian Medical Center. The candidate must have a Ph.D. degree in physics, with a solid background in theoretical, experimental, and computational physics. Knowledge of tomography theory and fluid physics is required. Five years of postdoctoral experience in numerical analysis, model development and large computational program coding. The candidate must be fluent in computer languages (Fortran, C, etc.) and operating systems (Unix, Vax). The candidate must have hands-on experience and management of electronic equipment. Send curriculum vitae to: **Paul Cannon, M.D., Division of Cardiology, 630 West 168 Street, New York, NY 10032. We take Affirmative Action toward Equal Opportunity.**

ECOLOGIST

The Biology Department of Holy Cross College seeks to fill a tenure-track position beginning in September 1994. The successful candidate must hold a Ph.D. at the time of appointment and will be expected to develop an active research program involving undergraduate students. The research must be compatible with the environment of a liberal arts college and should be in one or more of the following areas: community ecology, ecosystem ecology or aquatic ecology. The successful candidate will be expected to teach an upper-division course in his or her specialty, to contribute to existing offerings in ecology and introductory biology, and to develop a course for non-science majors. Holy Cross is a highly selective liberal arts college with an enrollment of 2700 students. It values excellence in both undergraduate teaching and research. Please submit applications by December 1, 1993, to: **Dr. Robert Bertin, Search Committee Chair, Biology Department, College of the Holy Cross, Worcester, MA 01610.** These should include curriculum vitae, statements of teaching and research interests, copies of publications, and names, addresses and telephone numbers of four referees. *Women and minorities are strongly encouraged to apply. Holy Cross is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH IMMUNOLOGIST Children's Hospital Oakland Research Institute

Applications are invited for the post of Assistant or Associate Research Immunologist. Applicants should have an M.D. or Ph.D. and a strong background in molecular immunology. The successful candidate will join a group working on humoral immunity to bacterial polysaccharides, including studies of variable region gene usage, idiotype analysis and functional activity of human antibodies to *Haemophilus influenzae* type b and group B *Neisseria meningitidis*. The candidate ultimately will be expected to establish an extramurally funded research program.

Interested candidates should send a letter of application, curriculum vitae, and names of three references to: **Children's Hospital Oakland, Yvette Williams, Human Resources, 747 52nd Street, Oakland, CA 94609. Equal Opportunity Employer.**

STAFF SCIENTIST (BIOCHEMIST): Requires Ph.D. in Biochemistry, or equivalent, and two years of postdoctoral experience in immunochemistry, and cellular and molecular biology, including experience in construction of malarial genomic and cDNA banks, cloning of malarial genes, DNA sequencing, PCR, bacterial expression and purification of malarial recombinant assays, ELISA, FACS analysis, malarial cell culture, surface radio-iodination of malaria-infected erythrocytes, immunoprecipitation of radiolabeled malarial antigens, *in vitro* malarial cytoadherence assays, agglutination of malaria-infected erythrocytes and light microscopy. To lead a group of researchers in the development of malaria vaccines and antimalaria drugs. \$53,075 per year. Job/interview site: Santa Clara, California. Send this ad and your résumé or letter of qualifications to: **Box 41, Science Classified Advertising, 1333 H Street, N.W., Room 814, Washington, DC 20005. Upon hire must show immediate ability to work in the United States.**

STAFF SCIENTIST (MOLECULAR BIOLOGIST): Requires Ph.D. in Molecular Biology or equivalent, and 3 years of postdoctoral experience in receptor, cell, and molecular biology, including experience in protein biochemistry, bacteriology, molecular and cellular immunology, cytokine receptor interactions, hemopoiesis, and eukaryotic cell culture and bioassays. To manage target-oriented drug discovery projects with a focus on applying novel screening technologies to find drug candidates active at particular receptors. \$52,975 per year. Job/interview site: Palo Alto, California. Send this ad and your résumé or letter of qualifications to: **Box 40, Science Classified Advertising, 1333 H Street, N.W., Room 814, Washington, DC 20005. Upon hire must show immediate ability to work in the United States.**

Ph.D. in **ANALYTICAL CHEMISTRY** for instruction in undergraduate Instrumental Analysis as well as other offerings in the department, for example, Biochemistry. Tenure-track anticipated for spring 1994. Rank and salary dependent upon qualifications. Quality teaching ability for non-science as well as science majors is a prerequisite and research with undergraduates expected. Evidence of both must be submitted and included in the three required letters of reference. Western Connecticut State University Department of Chemistry has eight full-time faculty members and offers a Bachelor's in chemistry as well as options in biochemistry and biotechnology. Send complete curriculum vitae including both undergraduate and graduate transcripts and letters of reference to: **Dr. Michael J. Uricheck, Chairperson, Department of Chemistry, Western Connecticut State University, Danbury, CT 06810.** Screening will begin immediately and continue until the position is filled. *An Equal Opportunity/Affirmative Action Employer.*

CLINICAL RESEARCHER—Clinical Nephrology group in major university-affiliated hospital in New York City (Brooklyn Heights) seeks Clinical Researcher. Nephrology Division has strong interest in lipids as well as biochemical markers for malnutrition in dialysis. Position requires data entry and teaching of postdoctoral physicians in fellowship training program. Significant research required as well as some statistical abilities. Manuscript writing a plus. Candidate must be a self-starter, with Ph.D. or M.S. in biology, endocrinology, nutrition or allied field. Very competitive salary. Send curriculum vitae to: **Alan Zwerin, Administrator for Nephrology, Long Island College Hospital, Brooklyn, NY 11201.**

National Needs Graduate Fellowships Iowa State University

CELL BIOLOGY
BIOCHEMISTRY
MOLECULAR BIOLOGY
PHYSIOLOGY

USDA National Needs Graduate Research Fellowships in **PLANT BIOTECHNOLOGY** are available in the Interdepartmental Plant Physiology Major (IPPM). Fellowships are for three years with an annual stipend of **\$17,000**. Candidates with an M.S. degree or prior research experience are preferred. Other fellowships and assistantships are also available. Inquiries to: Dr. R. Shibbes, National Needs Fellowships, IPPM, 1557 Agronomy Bldg., Iowa State University, Ames, IA 50011

*An Affirmative Action/Equal
Opportunity Employer*

UNIVERSITY OF CALIFORNIA, SANTA CRUZ DEPARTMENT OF BIOLOGY

Applications are invited for two tenure-track faculty positions beginning Fall 1994, contingent upon available funding. Salary: \$35,900-\$38,800. Minimum qualifications: Ph.D. or equivalent in Biology or a closely related field, postdoctoral research experience, university teaching experience, or demonstrated potential.

Assistant Professor in Molecular Marine Biodiversity; #277-923: Preference will be given to individuals who use molecular approaches to understand the generation and maintenance of biodiversity in the marine environment, and especially to those whose research emphasizes evolutionary processes and who can take advantage of the marine environment of Central California. Closing date: **January 10, 1994**.

Assistant Professor in Molecular Evolution; #284-923: Preference will be given to individuals with joint expertise in evolutionary genetics and molecular biology, and who will complement our new focus on using molecular techniques to investigate problems in organismal and population biology, especially those whose research emphasizes experimental studies of molecular function and evolutionary mechanisms rather than systematics. Closing date: **December 15, 1993**.

Applicants should have curriculum vitae, brief description of research and teaching interests, reprints, and have letters of recommendation from three referees sent to: Marine Biodiversity Search Committee or Molecular Evolution Search Committee, Department of Biology, Sinsheimer Laboratories, University of California, Santa Cruz, CA 95064.

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

Department Chairperson Biological Sciences

The Philadelphia College of Pharmacy and Science (PCPS) is seeking an individual with demonstrated leadership ability to chair the department of Biological Sciences. The department (12 full-time, 5 part-time faculty, 110 majors) offers four degree programs, two academic minors and has an excellent record in undergraduate research.

The ideal candidate will have a Ph.D. in a Biological discipline. Associate or Full Professor rank, evidence of administrative experience, an active research program and a strong commitment to undergraduate teaching/research. The position requires excellent interpersonal skills with a commitment to faculty/program development.

The position is available July 1, 1994. The review of applications will begin on December 15, 1993 and continue until an appointment is made. Candidates for the position should forward a curriculum vitae, transcripts, the names and addresses of three references and a statement of administrative philosophy to: Dr. Charles W. Gibley, Dean of Arts and Sciences, PCPS, 600 S. 43rd St. Philadelphia, PA 19104.

The Philadelphia College of Pharmacy and Science is an Equal Opportunity/Affirmative Action employer with a strong commitment to racial, cultural and ethnic diversity. Nominations of applications of individuals from a broad spectrum of backgrounds are encouraged.



Washington WASHINGTON UNIVERSITY IN ST. LOUIS

Biology & Biomedical Sciences

*Graduate and postdoctoral training
opportunities in...*

Genome Mapping, Analysis, and Sequencing

Doug Berg - Analysis of bacterial genomes; transposable elements.

Dave Chaplin - Definition of the gene content of the HLA complex.

C. Robert Cloninger - Genetic epidemiology of neuropsychiatric disorders.

Helen Donis-Keller - Human genetic linkage mapping; identification of disease causing genes.

Daniela Gerhard - Identification of genes causing human diseases.

Paul J. Goodfellow - Molecular basis of inherited cancer.

David Gutmann - Molecular biology of CNS tumor suppressor genes.

Pui-Yan Kwok - DNA sequence analysis and automated genetic mapping of the human genome.

David Schlessinger - Human genome mapping with YACs; X-linked genes and diseases.

David States - Computational genome analysis; databases in molecular biology.

Alan R. Templeton - The genetic epidemiology in humans with the candidate locus approach.

Bob Waterston - Genome analysis of the nematode *C. elegans*.

Rick Wilson - Automated DNA sequencing of *C. elegans* and mammalian genomes.

...and others

Please direct inquiries for postdoctoral training to specific faculty members. For graduate school information, please write to: Biology & Biomedical Sciences, Campus Box 8226, 660 S. Euclid Ave., St. Louis, MO 63110-1093; or call 800-852-9074.

Two Tenure-Track Assistant Professorships

Fisheries Centre
University of British Columbia

Applications are invited for two tenure-track Assistant Professorships in the Fisheries Centre of the University of British Columbia in Vancouver, B.C. Canada.

The Fisheries Centre is a new multi-disciplinary research unit located in the Faculty of Graduate Studies. The Fisheries Centre aims to focus on all aspects of the assessment and management of fisheries world-wide. A doctorate in a related field, research promise and strong teaching ability are required for both positions. Preference will be given to applicants who possess a broad range of skills and experience that will enable them to develop cooperative work with other members of the Fisheries Centre.

Position A: Tropical and Artisanal Marine Fisheries Biology & Assessment

Applicants should have experience in the ecology of exploited marine fish, the numerical assessment of the status and sustainability of marine fisheries, and the application of objective criteria, policy and bioeconomic analyses of fisheries management. Preference will be given to those with practical experience of the use of these skills applied to tropical and artisanal fisheries in the developing world. The position will carry a cross-appointment with the Department of Zoology.

Position B: Freshwater Fisheries/Forestry Interactions

Applicants should have experience of assessing the impacts of forest management practices on freshwater fisheries, particularly the effects of land management on stream hydrology and habitat, population dynamics of aquatic fauna, and the sustainability of aquatic resources. This position will be held jointly between the Fisheries Centre, the Department of Forest Sciences in the Faculty of Forestry, and the Westwater Research Centre in Graduate Studies.

UBC encourages all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities and appointments will be considered at the higher ranks of Associate or Full Professor for such applicants with suitable qualifications. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Closing date for applications is December 31, 1993.

(Note: These positions are subject to final budgetary approval.)

Applications indicating position of interest and listing names of three references should be sent to:



Professor Tony J. Pitcher
Director, Fisheries Centre
University of British Columbia
2204 Main Mall
Vancouver, B.C.
CANADA V6T 1Z4
Fax: (604) 822-8934

National Center for Human Genome Research
National Institutes of Health (NIH)

Cytogenetic Technologists

The National Center for Human Genome Research (NCHGR) seeks outstanding cytogenetic technologists with a Bachelor's or a Master's (or equivalent) degree trained in working independently in the preparation, analysis, and description of biologic specimens for cytogenetic research. The applicants should be experienced in all aspects of sample preparation (including blood, bone marrow, chorionic villi and solid tissue), cell culture (using biohazard procedures), harvesting of cell cultures (including staining of chromosomes using G-, Q-, and other relevant banding techniques), fluorescence in situ hybridization (using locus and chromosome-specific probes), and finally, microscopy and photography followed by chromosome analysis. These positions will offer a remarkable opportunity to be involved with the new NCHGR Intramural Program which will explore the most exciting arenas of human genetics, including medical genetics, gene discovery, gene biology, gene diagnostics, and gene therapy. Cytogenetic technologists with a strong track record in applications of molecular cytogenetics would be an ideal match for the plans of this program. Salary range is very competitive and related to experience; citizenship (or permanent resident status) is required. Candidates should submit curriculum vitae and the names of three references to:

Ms. Pat Stewart
Principal Administrative Officer
National Center for Human
Genome Research
Building 49, Room 4A60
9000 Rockville Pike
Bethesda, MD 20892



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BOSTON UNIVERSITY

Biomedical Engineering Faculty Positions

BOSTON UNIVERSITY invites applications and nominations for several tenure-track faculty positions in the **BIOMEDICAL ENGINEERING DEPARTMENT** in the areas of **NEUROENGINEERING** and **NEUROSCIENCE**.

We are interested in hiring outstanding individuals who work in areas which complement the research interests of our current faculty and who can build bridges between various groups within the department and affiliated centers on campus. Research by faculty and students takes place in departmental laboratories specializing in fields and tissues, hearing, intelligent systems and vision, molecular engineering and respiratory research as well as in three affiliated centers: the Biomolecular Engineering Research Center, the Center for Advanced Biotechnology, and the NeuroMuscular Research Center. Examples of bridging areas might include persons working at the channel or receptor level; or neuroengineers designing sensory (vision) or motor sub-systems for robotic applications. Appointees will be expected to conduct an active research program as well as develop and teach undergraduate and graduate courses.

Boston University has demonstrated its commitment to excellence in Engineering and Science through recent faculty recruiting drives, and major facilities expansions. The recent addition of a Center for Research in Advanced Biotechnology and the planned development of a Photonics Center and a Center for Neurosciences illustrate the diverse, yet interrelated areas of expansion.

Applicants should submit a curriculum vitae, a one page summary of research interests, and the names and addresses of three references to:

Herbert F. Voigt, Ph.D., Chairman
Department of Biomedical Engineering
College of Engineering
Boston University
44 Cummings Street
Boston, MA 02215-2407

The target starting date for positions is September 1, 1994. Consideration of applications will begin on November 1, 1993 and will continue until the positions are filled.

Boston University is an Equal Opportunity/Affirmative Action employer.



MOLECULAR VIROLOGY

The Division of Molecular Virology at Baylor College of Medicine invites applications for a tenure-track faculty position. Rank is open. An established research program is desirable. Of special interest are topics on viral pathogenesis and molecular biology of viral replication. Applicants should have a Ph.D. or M.D./Ph.D., postdoctoral experience in virology, and demonstrated research productivity. Applicants are expected to pursue an independent research program and participate in graduate training. Faculty activities focus on viral replication, gene expression, pathogenesis, oncogenes, and disease prevention. This is an excellent opportunity to join an active department with newly renovated laboratories. Send CV, names/addresses of at least 3 references, statement of current research activities and future plans by Dec. 15, 1993, to: Dr. Mary Estes, Recruitment Committee, Division of Molecular Virology, Baylor College of Medicine, Houston, TX 77030.

An EO/AA employer.

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Department of Biochemistry at the University of Illinois at Urbana-Champaign is seeking a distinguished scientist for the position of Professor and Head of the Department. Senior candidates with outstanding accomplishments in research and an interest in administration and teaching are urged to apply. Candidates should send a letter of application, curriculum vitae, and the names of three references. In order to ensure full consideration, completed applications and nominations should be submitted by December 1, 1993 to:

Thomas G. Ebrey, Chair
Biochemistry Search Committee
University of Illinois
School of Chemical Sciences
505 S. Mathews St.
106 Noyes Laboratory D-1
Urbana, IL 61801

Phone: 217-333-2015

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

BIOMATHEMATICAL MODELER - A senior research position is available immediately with ManTech Environmental in their Biological Simulation Research Program of the Toxic Hazards Research Unit (THRU) located in Dayton, Ohio. The minimum qualifications for this position are (1) Master's Degree in Engineering, Mathematics, Biochemistry, or Life Sciences; and (2) a detailed understanding of mathematical and physical principles underlying chemical transfer processes in biological systems. Preferred candidates will have (1) a Ph.D. in same areas; (2) a general understanding of the kinetics and toxicology of xenobiotics; and (3) experience in the development and application of physiologically based pharmacokinetic models. Duties will include the development of mathematical descriptions of uptake, distribution, metabolism (and other chemical interactions), and elimination of chemicals in biological systems; the incorporation of developed mathematical descriptions into computer programs using simulation software; the preparation of written results of studies for presentation to customer and for publication in peer reviewed journals; and guidance to laboratory personnel for the design of experiments and collection of data essential to model validation. ManTech Environmental offers competitive salaries and a complete benefits package. Qualified applicants please submit current resume, with cover letter including salary requirements, to: **Ms. Lois Doncaster, Human Resources/01, ManTech Environmental Technology, Inc., a ManTech International Company, P.O. Box 31009, Dayton, OH 45437-0009.** ManTech Environmental Technology, Inc. is an Equal Opportunity Employer.

Virology Scientist IV

Baxter Biotech Immunotherapy Division, Baxter Healthcare Corporation's R&D start-up division, seeks an energetic individual who can contribute effectively in a multi-disciplinary R&D environment.

This motivated individual shall participate in virus risk reduction studies and technology development in the area of Virology. The position requires an MS in Virology, Microbiology, Biology, Biochemistry or related field with 3 to 5 years experience in viral assays process validation and/or viral inactivation technology, or PhD with 1 to 3 years experience. Strict interpretation and compliance with sterile techniques and biohazard containment are required. Understanding of GLP/GMP along with excellent written and oral communication skills are required. Computer literacy would be beneficial.

The name Baxter Healthcare Corporation is synonymous with products, systems and services devoted to improving health care throughout the world. We are a Fortune 100 company providing a smoke-free environment, competitive compensation and benefits. Please send your resume in confidence to: **Baxter Biotech Immunotherapy Division, Human Resources Dept., 1710 Flower Avenue, Duarte, CA 91010.** Employment is contingent upon the result of a drug screening test. An Affirmative Action/Equal Opportunity Employer.

Immunotherapy Division

Baxter

PHYSICIAN RESEARCH DIRECTOR

Excellent opportunity to be the Medical Director of a clinical research program for the person capable of initiating and managing a research program limited to women's diseases. You will be associated with one of the largest nonprofit women and infants' specialty hospitals with a newly established research division. Researcher must have demonstrated success in receiving grants and contracts with NIH or other federal agencies. Opportunities exist to collaborate with other researchers in the region including New Orleans, Houston, and Birmingham, as well as on-going research projects with Bowman-Gray and other institutions. Live in a university city of 450,000 with many cultural amenities, other major research institutions and mild winters. Please submit curriculum vitae, a statement of research background and interests, a list of projects completed with sources of funding and dollar value, salary expectation, and date of availability. Compensation package attractive and flexible. Please respond by January 31 to: Phyllis Greenblatt, Research Director, Woman's Hospital, Post Office Box 95009, Baton Rouge, Louisiana 70895-9009.

*Woman's
Hospital*

Equal Opportunity Employer

VERTEBRATE COMPARATIVE ENDOCRINOLOGIST


Department of Integrative Biology
University of California at Berkeley

Applications are invited for a tenure-track position as Assistant Professor starting July 1, 1994. Candidates should have demonstrated excellence, originality and productivity in research in vertebrate comparative endocrinology, and should have a strong interest in undergraduate and graduate teaching. The appointee will join an active, interdepartmental group in endocrinology and will be part of a broader program in integrative comparative biology involving cellular, organismal and evolutionary biology with laboratories in the new Valley Life Sciences Building. Teaching responsibilities will include participation in general and/or comparative endocrinology courses in the human biology program.

Applications, including a curriculum vitae, a list of publications, a reprint of the three most significant publications, a brief (2 pages maximum) statement of research and teaching objectives, and three letters of evaluation should be sent to: Chair, Endocrinology Search Committee, Department of Integrative Biology, University of California, Berkeley, CA 94720.

The closing date for receipt of applications is January 1, 1994. Early applications are encouraged.

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

 A commitment to bringing new technology to our field. The most comprehensive array of genetic tests. The highest standards of service. This is Integrated Genetics. Our goal is to achieve the leading position in genetic testing research and development. We have the people, the values, and the financial strength to accomplish this goal. Join IG - the Genetic Testing Company.

Research Scientist

Involves design and interpretation of molecular experiments for disease gene localization and identification. Projects will employ 'positional cloning' to delimit the disease locus and contemporary methodologies to survey cloned genomic sequences for their transcriptional potential. Position will be 50%-70% benchmark plus management of Research Associate.

Requires Ph.D. in Molecular Biology, Genetics or Biochemistry with 2-3 years' post-graduate experience. Expertise should extend beyond conventional molecular methodologies and include many of the following skills: genomic library construction and use with YAC or BAC vectors, genetic linkage analysis, DGGE/SSCP, cDNA library construction and use, PCR, RT-PCR, FISH, PFGE, sequencing and expression cloning.

Integrated Genetics offers excellent compensation and benefits that include incentive stock options.

Please contact Markey Burke, Dept. S1022, Integrated Genetics, One Mountain Road, Framingham, MA 01701-9322.

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PURDUE UNIVERSITY DEAN School of Agriculture

Purdue University invites applications and nominations for the position of Dean of the School of Agriculture.

Established in 1869, Purdue is Indiana's land-grant university. The School of Agriculture is organized into four principal administrative units, each under an associate dean and director: Academic Programs, Agricultural Research, Cooperative Extension, and International Programs. The School has an annual budget of approximately \$95 million, employs over 900 professorial and professional staff members and enrolls 2,100 undergraduate students and 500 graduate students.

The Dean's primary mission is to provide vision and leadership in the School, promoting an environment optimal for the pursuit of excellence in teaching, research and service. As chief executive officer of the School, the Dean actively represents the School to a variety of constituents inside and outside the University, and is responsible for many regulatory functions that are often found in state departments of agriculture. The Dean reports directly to the Executive Vice President for Academic Affairs and works closely with other deans, vice presidents and the President.

Qualified candidates will possess an earned doctoral degree, present a distinguished record of scholarship appropriate for a tenured full Professorship, have demonstrated excellence in administration, and have a working knowledge of state and national funding environments. They will be sensitive to all constituencies served by the University and be able to articulate and advocate the goals of the School.

Nominations or letters of interest should be sent to:

Dean Harry A. Morrison
Chair of the Search Advisory Committee
Science Administration
Math Science Building
Purdue University
West Lafayette, Indiana 47907-1390

Screening will commence December 1, 1993, and continue until this position is filled. Questions regarding the position can be addressed to Dean Morrison at (317) 494-1730.

Purdue University is an equal opportunity-affirmative action employer. Minority and women candidates are especially encouraged to apply.

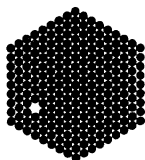
Animal cellular or molecular biologist, to teach upper division courses in an area of specialty for majors, lower division courses in cell biology for majors, and non-majors courses as a part of a general education programs. Pepperdine is primarily a teaching institution, thus candidates with some teaching experience are preferred.

The department maintains an active research program that involves undergraduate students. As a part of that program, the successful candidate will be expected both to seek personal grants and to contribute to collaborative site grants administered by the department. To complement other areas of teaching and research in the department, candidates who use techniques of modern molecular biology to investigate basic problems in animal cell biology will be given special consideration. Ph.D. required; rank and salary commensurate with training and experience.

Pepperdine University is a Carnegie level I, private, Christian, liberal arts university under the control of a self-perpetuating Board of Regents and is related to the Churches of Christ. The Division is seeking candidates who are actively supportive of the university's Christian commitment "which celebrates and extends the spiritual and ethical dimensions of the Christian faith." Pepperdine University is an Equal Opportunity Employer and actively encourages women and minority applicants.

Applications will be reviewed until a suitable candidate is found, but should be received by December 15, 1993 to ensure consideration.

Mail curriculum vitae along with names and addresses of three references to: Chair, Biology Search Committee, Natural Science Division, Pepperdine University, 24255 Pacific Coast Highway, Malibu, CA 90263.



EMBL

The European Molecular Biology Laboratory, an international research organization situated in Heidelberg, Germany, has a vacancy for a

GROUP LEADER

The Cell Biology Programme at the EMBL invites applications for a group leader position. We are especially interested in, but not restricted to, candidates with a strong research background in the following areas: membrane trafficking in eukaryotic cells; the cell biology of the cytoskeleton and nuclear envelope structure and function.

Candidates should submit curriculum vitae including a description of current and future goals and arrange for three letters of recommendation to be sent to the Personnel Section, quoting reference no. 93/30. The deadline for receipt of applications is 1 December 1993. Further information can be obtained from Kai Simons, Programme Coordinator (tel. +49 6221 387 334).

As an inclusive international organization, EMBL encourages applications from women and nationals of Southern European or other currently underrepresented member states.

EMBL
Personnel Section,
Postfach 10 22 09
D-69012 Heidelberg
Germany

STANFORD UNIVERSITY

COMBINED ADMISSIONS MODE IN BIOLOGICAL AND BIOMEDICAL SCIENCES

In addition to entering a given program directly, students may now opt to enter graduate study in the biological and biomedical sciences through the Combined Admissions Mode or CAM.

This program enables a small number of select students to begin graduate study at Stanford University without first committing to a given department or program. During the first year, following a series of "rotations" in different departments, CAM students select a thesis advisor and program in which to complete the Ph.D. The flexibility and breadth offered by CAM should appeal to those who view two or more departments or programs as equally attractive. Participating programs are:

DEPARTMENTAL:

Biochemistry
Biological Sciences
Cell Biology
Chemistry
Developmental Biology
Genetics
Microbiology and Immunology
Pharmacology
Molecular and Cellular Physiology

INTERDEPARTMENTAL:

Biophysics
Cancer Biology
Immunology
Medical Information Sciences
Neurosciences

More Information and application forms for CAM can be obtained from: Office of Graduate Admissions, Old Union, Room 137, Stanford University, Stanford, CA 94305-3005. Deadline for receipt of completed applications is Dec. 15, 1992.

Stanford University is committed to the principles of Affirmative Action and welcomes applications from students of either sex and any race, color, religion, sexual orientation or national and ethnic origin.

TargetTech, Inc. (a wholly owned subsidiary of the Immune Response Corp. of Carlsbad, CA) is a research stage, biopharmaceutical company pursuing a novel technology of receptor-mediated delivery of genes and antisense.

Ph.D. Bio-Organic Chemist / Director Level

This is an exceptional opportunity for a highly motivated individual who desires to be an integral member of a multidisciplinary team in our entrepreneurial environment.

The individual will lead a team of chemists optimizing delivery systems that utilize proteins as carriers for DNA. The successful applicant will also participate with manufacturing personnel in preparing for a clinical trial in 1994 with an antisense product against hepatitis B. The scientist should possess formal training and experience in protein chemistry or nucleic acid chemistry. A working knowledge of synthetic organic chemistry would also be advantageous. Management experience is highly desirable.

TargetTech, Inc. is committed to providing a nurturing environment for creative, highly motivated scientists by offering competitive salaries, a comprehensive benefits package, and equity participation in the company.

Submit resumes to: **TargetTech, Inc., Human Resources, 290 Pratt St., Meriden, CT 06450.** We are an equal opportunity employer.

 **TARGETTECH INC.**

BRAIN IMAGING RESEARCH OPPORTUNITIES

The Neuroimaging and Drug Action Section, Addiction Research Center, National Institute on Drug Abuse (NIDA) of the National Institutes of Health (NIH) has opportunities in the area of medical image processing for research fellows under the Intramural Research Training Award (IRTA) and/or research associates under the Postdoctoral Research Associateship Program conducted by the National Research Council (NRC). The research involves developing new modalities for analysis of medical images (PET and MRI) including image registration techniques and statistical analysis of change distributions. The applicant will work with an established PET team using components of the NIH Multimodality Image Processing System (MRIPS) to implement analysis algorithms. A Ph.D. in Physics or Electrical Engineering, with a strong background in computerized image processing is required. To qualify for the position, the applicant may have no more than five years relevant post-doctoral experience. Salary is commensurate with experience. Opportunities at NIH are open to all citizens of the United States and to foreign nationals who hold an Immigrant (Permanent Resident) Visa. The environment is smoke-free and drug-free. To apply, send a curriculum vitae, summary of research interests, publication list, and names of four scientists who can provide reference of scientific work to:

Dr. Edythe D. London, Ph.D.
NIH, NIDA
Addiction Research Center
P.O. Box 5180
Baltimore, MD 21224



NIH is an Equal Opportunity Employer

Environmental Sciences

Located in Las Vegas, Nevada, the Environmental Sciences Department of EG&G Energy Measurements assesses, monitors, and mitigates impacts of U.S. Department of Energy sponsored activities on biological resources at the Nevada Test Site.

We are seeking scientists who possess advanced knowledge of arid-land reclamation methods/research, animal ecology or plant ecology; impact monitoring/assessment; and strong management and quantitative skills. MS or PhD degreed candidates are preferred.

Reclamation Scientist

Candidate will conduct field surveys and develop site-specific reclamation plans as well as design/implement field studies and monitoring programs related to native vegetation associations, natural succession, and reclamation field trials. Requires experience in soil profile descriptions, topsoil salvaging, and revegetation success monitoring.

Animal Ecologist

Candidate will design and conduct field studies and impact monitoring programs related to desert tortoises and other animal species as well as assist with developing/implementing mitigation techniques. Requires specialization in animal ecology and population dynamics.

Plant Ecologist

Candidate will conduct monitoring studies of vegetation communities, assist in managing/analyzing vegetation monitoring data as well as assist/monitor reclamation of disturbed sites. Requires specialization in plant or range ecology and plant-soil-water relationships.

EG&G Energy Measurements, Inc. offers a competitive salary (\$32,670 - \$50,640 based on job title and experience) and benefits package. Please send resumes to: **EG&G Energy Measurements, Inc., Attn: Alma Vela-Belmonte 19/93, P.O. Box 1912, M/S C1-21, Las Vegas, NV 89125.**

An equal opportunity employer. U.S. Citizenship and a pre-employment examination, which includes a drug screening, are required.

 **EG&G
ENERGY MEASUREMENTS**

FELLOWSHIP PROGRAMS UNITED STATES - ISRAEL

BARD, The United States-Israel Agricultural R&D Fund, announces two Fellowship Programs promoting cooperative agricultural research.

The POSTDOCTORAL FELLOWSHIP PROGRAMS provides support for candidates who are citizens of either the United States or Israel and who have fulfilled the requirements for the Ph.D. degree within the last three years. American candidates must carry out their fellowship research in Israel and Israeli candidates must carry out their fellowship research in the United States. The initial award is for one year and under certain conditions, a one year extension will be considered. The award for the first year is \$27,000 for living and travel expenses and it is paid directly to the fellow. An allowance not exceeding \$3,000 may also be paid to the host institution for operating expenses incurred in the research.

The RESEARCH FELLOWSHIP PROGRAM is intended to support citizens of the United States who are established research scientists in American non-profit research institutions, universities or federal and state agencies during a period of 4 to 12 months in Israel. The grant is \$3,000 per month and will be paid in coordination with the base institution of the fellow. One round trip air ticket will be provided.

Applications for either program must reach BARD's offices by January 15.

For information on application procedures please contact BARD's offices at:

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USDA-ARS-OIRP
Room 102, Bldg. 005, BARC-West
Beltsville, MD 20705
U.S.A.

Tel: 301-504-5605
Fax: 301-504-5298

BARD
The Volcani Center
P.O.B. 6
Bet Dagan
Israel 50250

Tel: 972-3-9655133
Fax: 972-3-9662506

Associate Provost and Vice President for Research Auburn University

Auburn University invites nominations and applications for the position of Associate Provost and Vice President for Research at its main campus in Auburn, Alabama. Women and minorities are encouraged to apply.

Auburn University has received increasing recognition nationally and internationally as a comprehensive land-grant university. Under new leadership, it is strategically poised to become an eminent public university, strongly committed to the pursuit of excellence in teaching, research, and extension. The Auburn University main campus offers 150 degree programs to approximately 22,000 students through 13 schools and colleges. The University has a major commitment to research.

The Associate Provost and Vice President for Research reports to the Provost and Vice President for Academic Affairs and is responsible for the overall research program of the university. This involves planning, developing, budgeting and administering the current and future research activities characteristic of a major land-grant research university. In addition, it involves evaluating and benchmarking the many university research programs in order to insure continuous improvement in institutional as well as program research productivity. It is also the responsibility of this individual to work closely with other associate provosts and extension programs to advance the state, the nation and the world in the twenty first century.

Candidates must hold a Ph.D. degree or its equivalent and must have a distinguished record of academic achievement and qualifications for appointment as tenured professor within one of the campus academic units. Candidates must also possess a commitment to scholarship in all University programs, a national reputation in research or research management, and strong communications skills. Preference will be given to candidates who have administrative experience, are familiar with research funding sources and have established a record of sustained funding from competitive sources.

Review of candidates will begin on December 1, 1993. Nominations and applications should be sent to:

Dr. William F. Walker, Chair
Associate Provost/Vice President for Research Search Committee
108 Ramsay Hall
Auburn University
Auburn University, AL 36849-5330

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Department of Cell Biology
Georgetown University Medical Center
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Washington, D.C. 20007

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Scientist - Molecular Biology

The candidate should have a PhD/MS, knowledge in immunoglobulin gene manipulation and expression both in prokaryotic and eukaryotic systems. Job duties include:

1. Design and Construction of Various Prokaryotic and Eukaryotic Expression Vector - Should be proficient in: cloning, subcloning, plasmid DNA prep, sequencing, PCR and other basic techniques in Molecular Biology.
2. Mammalian Expression of Recombinant Proteins - Should be familiar with tissue culture, transfection and the subsequent analysis of the expressed proteins.
3. Bacterial Expression of Heterologous Proteins - Should have experience in the expression, purification and analysis of recombinant proteins in *E. coli*. Proficiency in immunoblotting, immunoprecipitation and ELISA assay is an advantage.

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EVOLUTIONARY GENETICIST—The Department of Biology at New Mexico State University seeks to fill a tenure-track position in plant evolutionary genetics for fall 1994. Candidates with expertise in quantitative genetics and/or molecular genetics are especially encouraged to apply. The successful candidate will develop a vigorous research program and will teach at the graduate and undergraduate levels. The Department of Biology has a flourishing program in ecology and evolution and attracts excellent graduate students. Submit curriculum vitae, concise statements of research and teaching interests, and the names, addresses, and telephone numbers of at least three references to: Dr. Daniel J. Howard, Genetics Search Committee, Department of Biology, New Mexico State University, Las Cruces, NM 88003. Deadline for applications: November 19, 1993. *New Mexico State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

RADIOCHEMIST

Qualifications: Nuclear Chemist or Radiochemist. Position and salary dependent on experience and qualifications. Candidate must have Ph.D. degree with experience in working with high levels of radioactive nuclides. Background in labeling with radio-halogens is desirable. Work entails labeling monoclonal antibodies with astatine for radioimmunotherapy of cancer. Research work will be performed in collaboration with Drs. William Eckelman, Otto Gansow and Thomas Waldmann at the NIH.

Send curriculum vitae, or for further information contact:

Ms. Jean Decker
Metabolism Branch, WCI
National Institutes of Health
Building 10, Room 4N115
Bethesda, MD 20892
Telephone: 301-402-1898

National Institutes of Health, Public Health Service. NIH is an Equal Opportunity Employer.

ANNOUNCEMENTS

PHARMACEUTICAL DESIGN: ANTI-SENSE, TRIPLE HELIX, NUCLEIC ACID BINDING DRUGS.

January 31–February 1, 1994: Hyatt Ricketts, Palo Alto, California.

SPEAKERS: F. Arcamone, P. Aristoff, D. Boger, D. Burger, C. Cantor, D. Cook, W. Denny, C. Edwards, C. Helene, M. Hogan, L. Hurley, J.S. Lazo, S.J. Lippard, J.W. Lown, P. Miller, S. Mirkin, P. Nielsen, J.J. Rossi, D.S. Sigman, J. Stubbe, Y. Sugita, A.H.J. Wang, M. Waring, G. Zon. **Organizers:** James Larrick, Cynthia Edwards; Abstracts due January 15, 1994. **Sponsor:** Palo Alto Institute of Molecular Medicine; 2462 Wyandotte Street; Mountain View, CA 94043; FAX: 415-694-7717; Telephone: 415-694-4996.

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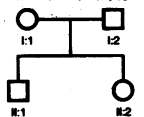
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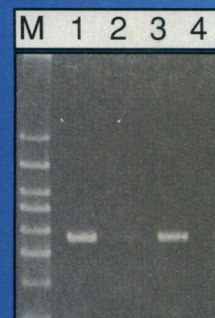
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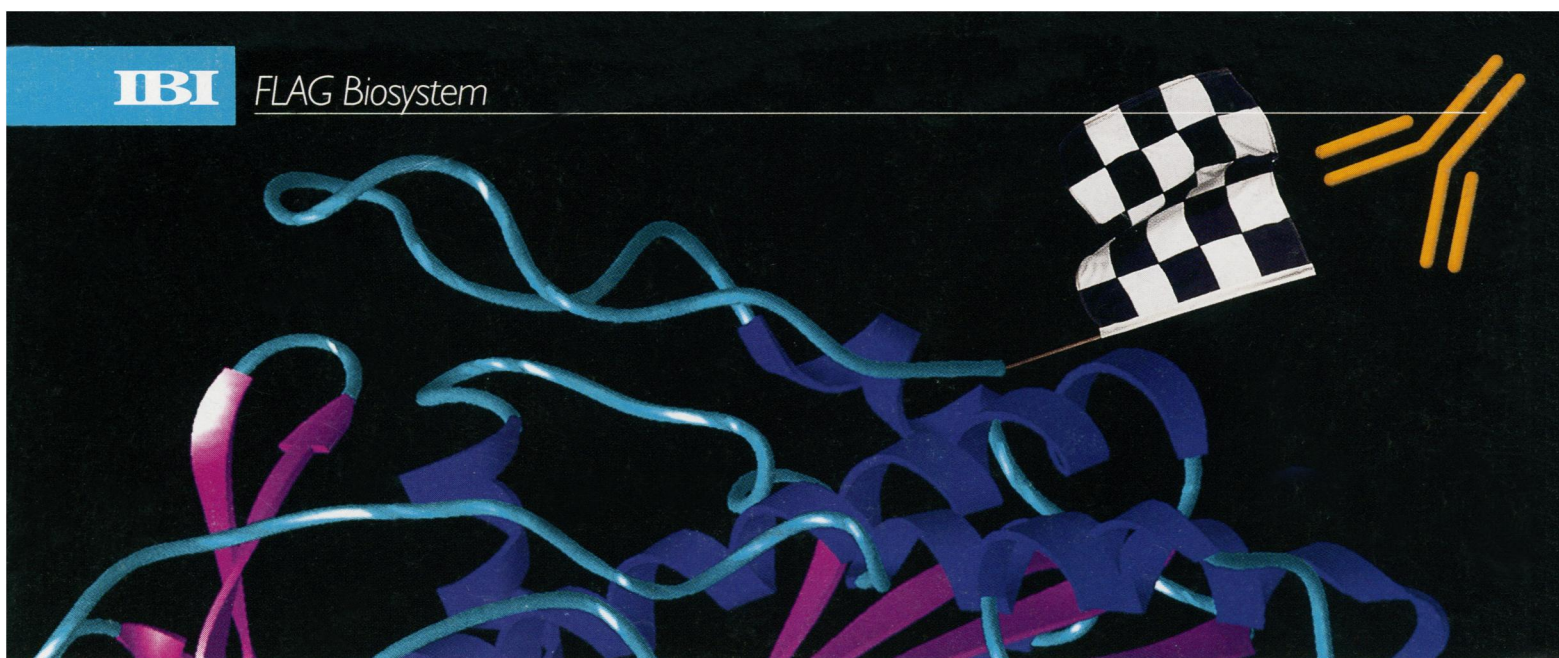
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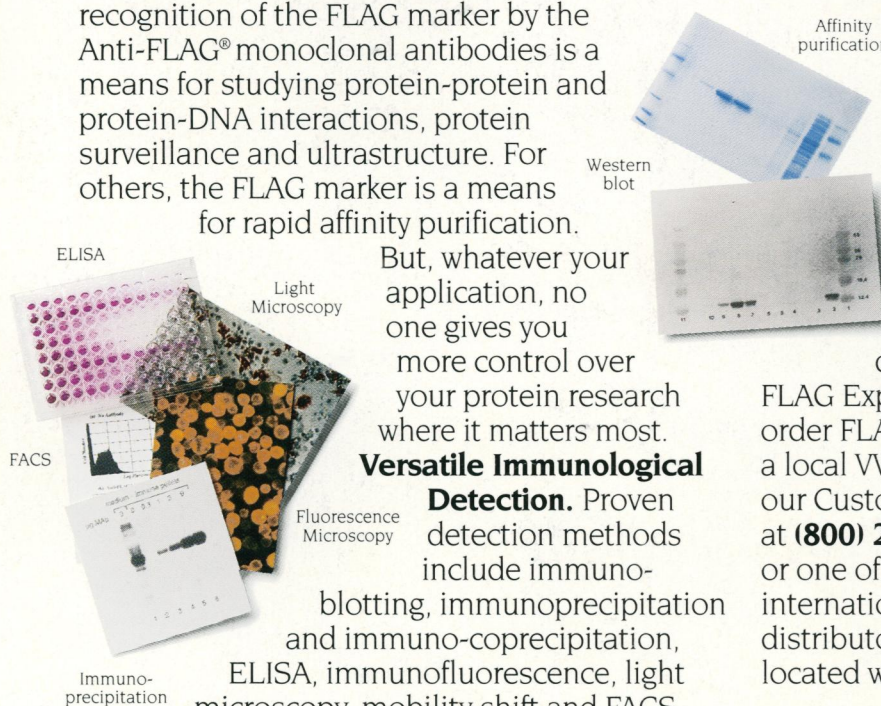
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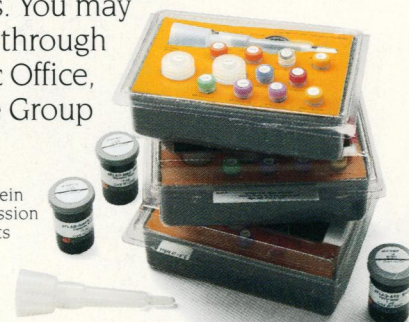
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