Equation-Solving Software

TK Solver 2.0 is software for solving problems involving work with equations. A new feature, Presentation View, lets users solve problems and create presentation-quality reports without ever leaving the TK Solver program. As in earlier editions of the program, different types of information such as variables, rules, tables, and plots are organized into sheets. Any number and combination of sheets can be used to create a presentationquality interface, with what-yousee-is-what-you-get graphics. The program requires a 286 or higher processor, DOS version 2.0 or higher, at least 1 MB of random access memory, and a hard disk. Universal Technical Systems. Circle 85.

Nonradioactive Detection

Two Rad-Free Non-Isotopic Detection Kits are available for protein immunoblotting analysis in a minigel format. The chemiluminescent kit features a 1,2dioxetane-based method for quantitative results. The colorimetric kit is based on the alkaline phosphatase-BCIP/NBT reaction. The kits are available with the following alkaline phosphatase conjugates: (goat) antimouse, anti-human, anti-rabbit, or Protein A/G. Schleicher & Schuell. Circle 86.

Imaging Instrument

CELLscan is a computer-based instrument that attaches to the user's microscope and allows researchers to visualize three-dimensional (3-D) images of living cells with improved contrast and resolution. Standard features of the system include image acquisition, image deblurring, 3-D visualization, critical parameter quantification, image archiving and retrieval, report generation,



and publication-quality hardcopy output. The contrast and resolution of microscope images are greatly enhanced by removing out-of-focus flare using the most advanced image processing and digital reconstruction algorithms. Scanalytics/CSPI. Circle 87.

Dialysis Tubing

BioDesignDialysis Tubing is a thin, transparent, tear-resistant cellulosic tubing that allows rapid dialysis. Specifically prepared for biological research, extensive efforts are made to ensure uniform wall thickness, membrane integrity, porosity, and purity. For normal laboratory applications, the tubing is simply wet and used. It has a nominal 8000 molecular weight cut-off; five available diameters range from 6.4 to 49.5 mm. Available in 100-foot rolls or 12-inch cut strips, it is shipped in air-tight moisture-proof plastic containers to maintain flexibility and for maximum shelf life. BioDesign of New York. Circle 88.

Personal Peptide Synthesizer

The Synergy Personal Peptide Synthesizer is designed to make peptides in less time and for less cost compared with ordering from a commercial lab. The synthesizer makes 30 to 60 mg of peptides up to 30 amino acids long following an easy, 10-min set-up procedure. A feedback monitoring system manages the synthesis to extend difficult couplings and to ensure the quality of each peptide. The instrument is designed for scientists who use peptides in immunological studies, cancer research, and related applications. No detailed understanding of peptide chemistry is required. Applied Biosystems. Circle 89.

Diagnostic Grade DNA

Diagnostic Grade DNA is suitable for such applications as polymerase chain reaction. It is purified through reversed-phase highperformance liquid chromatography and comes with quality control documentation, including reversed-phase chromatography, ion exchange chromatography, and base composition analysis. Synthecell Corp. Circle 90.

30 Minute RNA Isolation Kit

RNA STAT-30 kit is a new total RNA isolation and mRNA enrichment kit based on the guanidinium phenol single-step method of RNA isolation. The kit contains an extraction reagent containing phenol, guanidinium, and proprietary stabilizers compatible with the speed and selectivity of push affinity column chromatography. The kit isolates total RNA and mRNA from tissue and cells of human, animal, plant, yeast, bacterial, and viral origin. The RNA is isolated within 30 min with minimal low-speed centrifugation. No further purification is required for many subsequent procedures, including Northern (RNA) blotting, molecular cloning, ribonuclease protection, and polymerase chain reaction. Tel-Test. Circle 91.

Literature

Gilson Instruments for HPLC, LC and Sample Preparation highlights more than 30 instruments for high-performance liquid chromatography (HPLC), liquid chromatography (LC), and sample preparation. Gilson Medical Electronics. Circle 92.

The 1992–1993 Owl Scientific Catalog includes a complete line of electrophoresis equipment, radiation safety equipment, laboratory accessories, and chemical reagents. Owl Scientific Plastics. Circle 93.

Isco Product Guide: Instruments for Separation and Analysis describes a comprehensive line of instruments and systems for preparatory and analytical chromatography, supercritical fluid extraction, capillary electrophoresis, and gel electroelution. Isco. Circle 94.

Sigma ImmunoNotes, Number 8 includes an article on a new cytokine called stem cell factor and a listing of a line of growth factor and cytokine products. Sigma Immunochemicals. Circle 95.

Kontes Chemistry and Life Sciences Products features descriptions of more than 6000 laboratory glassware products. Kontes. Circle 96.

Instrumentation Newsletter, Autumn 1992 contains articles on LabVIEW for Windows and LabVIEW for Sun, the first releases of multiplatform versions of a graphical software programming system for instrumentation. National Instruments. Circle 97.

Low Volume Injector is a brochure on a gas chromatography accessory that combines low volume direct injection with the ability to connect to a purge and trap transfer line. The instrument is designed for analysis of volatiles with purge and trap sample introduction. J & W Scientific. Circle 98.

Introducing Geltrek: The Next Generation (in Ultra High Resolution Vertical PAGE Electrophoresis Technology) is a brochure on a new system. Zaxis Inc. Circle 99.

Chromatographic Drug Standards is a catalog featuring nearly 600 compounds, including neat drugs, metabolites, internal standards, and deuterated drugs. Newly listed are anabolic steroids and metabolites. Alltech. Circle 100.

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

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POSITIONS OPEN

Section of Ecology and Systematics Division of Biological Sciences CORNELL UNIVERSITY

TERRESTRIAL ECOSYSTEM SCIENTIST: The Section of Ecology and Systematics invites applications for a tenure-track position in ecosystem science at the level of assistant professor, or at the level of beginning associate professor with tenure. The Section seeks a broadly trained, creative, and experienced ecosystem scientist or biogeochemist to complement cur-rent strengths as well as to add further diversity to the Section's faculty. An interest in both basic science and its application to environmental problems is desirable. The successful candidate will have a diverse research program and a strong interest in teaching. Teaching responsibilities will include participation in introducto-ry ecology and an upper-level ecosystem science course. Participation in University-wide programs, including the newly formed Center for the Environment, is anticipated. The position will be available beginning Fall 1993. The Search Committee Chair is Dr. Robert W. Howarth (607-255-6175).

MATHEMATICAL BIOLOGIST: The Section of Ecology and Systematics invites applications for a tenure-track position in mathematical biology at the assistant professor level. The Section seeks a broadly trained, interactive, and creative mathematical biologist to complement our current strengths in ecology and evolutionary biology as well as to add further diversity to the Section's faculty. Substantial mathematical and computational skills are essential; diverse research in-terests and strong links between theory and data or environmental issues are highly desirable. Excellence in teaching will be expected. Potential teaching responsibilities include participation in an introductory course in evolution or ecology and an advanced course in mathematical or evolutionary ecology. The position will be available beginning Fall 1993. The Search Committee Chair is Dr. Nelson G. Hairston, Jr.

ANIMAL PHYSIOLOGY AND MORPHOLO-**GY INSTRUCTOR:** The Section of Ecology and Systematics invites applications for a non-tenure-track Instructor with a Ph.D. to oversee the laboratory Instructor with a Ph.D. to oversee the laboratory portions of an environmental physiology course and a functional morphology course. The courses are taught in alternate spring semesters. Knowledge of animal physiology and anatomy and experience with instru-mentation and microcomputers (Macintosh and IBM) are required. Participation in a fall semester graduate seminar is welcomed, and individual or collaborative research is encouraged. The three-year appointment will begin Fall 1993 and is renewable. The salary is \$21,200 for the academic year. The instructor will be \$21,200 for the academic year. The instructor will be able to initiate grant proposals for summer salary. Applicants should submit curriculum vitae, a descrip-

tion of research interests and teaching interests and experience, selected reprints, and have at least three letters of recommendation sent on their behalf to: Chair, Section of Ecology and Systematics, Cornell University, 145 Corson Hall, Ithaca, NY 14853– 2701. Please include names and telephone numbers of referees with application materials. We will begin re-referees with application materials. We will begin reviewing applications on February 1, 1993. Cornell University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

MOLECULAR HEMATOPATHOLOGIST— The Department of Pathology at The University of Pittsburgh Medical Center is seeking an AP or CP certified hematopathologist at the ASSISTANT PRO-FESSOR level, who is interested in the application of molecular genetic and other innovative techniques to the study of hematopoietic and lymphoid neoplasms. Someone interested in novel applications of flow cytometry in hematopathology would also be considered. The candidate would be the fifth member of the Hematopathology Division, which is currently responsible for diagnostic hematopathology, flow cytometry, image analysis, and clinical hematology. The candidate would also interact with members of the Molecular would also interact with members of the Molecular Diagnostics Division, who are responsible for routine hematopoietic and lymphoid molecular testing. Please send curriculum vitae and the names of three references to: Steven H. Swerdlow, M.D.—Director, Division of Hematopathology, University of Pittsburgh Medical Center, Montefiore University Hospital, 3459 Fifth Avenue, Pittsburgh, PA 15213-3241.

POSITIONS OPEN

ASSISTANT PROFESSOR, tenure-track-beginning Fall, 1993. The Department of Biological Sciences at Mankato State University (MSU) is seeking a Microbiolo-gist with demonstrated expertise in molecular biology and teaching experience in general microbiology. The successful candidate will be expected to teach general microbiology, environmental microbiology and/or applied microbiology. The successful candidate will also advise undergraduate and matter's darge candidate will also advise undergraduate and master's degree candidates, participate in research to involve students at both the undergraduate and graduate level, and participate in faculty governance. Earned doctorate with microbiology emphasis required at time of employment. Postdoctoral and/or industrial experience desirable. Demonstrated ability to conduct independent research in an understrated ability to conduct independent research in an under-graduate/graduate setting an asset. Opportunity for collabo-ration with active research groups both within and outside the University. Send curriculum vitae, transcripts, and three letters of reference to: Dr. Bill Bessler, Microbiology Search Committee, Biology Department, MSU Box 34, Mankato State University, Mankato, MN 56002–8400 or call (507) 389-2786. Application deadline January 22, 1993 or until filled. Mankato is located approximately 85 miles southwest of Minneapolis/St. Paul with a local popu-lation of around 40,000. The University has a student population of 15,000, and is noted for a strong commitment to regional service and education. Application from minorto regional service and education. Application from minorities and women encouraged. MSU is an Equal Opportunity/Affirmation Action

Employer.

The Applied Mechanics Division of the Mechanical Engineering Department of Stanford University an-nounces an opening for a tenure-line faculty position at the **ASSISTANT PROFESSOR** level. Interested appli-cants should have strong teaching and research interests in the general area of dynamics, including complex large multibody systems, nonlinear dynamics, including complex large ical analysis and flexible/rigid body systems. Emphasis is placed on the application of modern techniques of dy-namics to problems in bioengineering, including (but not restricted to) dynamics of biological systems and human motion.

Stanford University is an Equal Opportunity Affirmative Action Employer and welcomes applications from interested minority candidates.

Applicants should submit a current résumé and a list of publications and three referee names. Prospective candipublications and three referee names. Prospective candi-dates should submit as soon as possible but not later than March 1, 1993 to ensure full consideration to the following: Professor J. C. Simo, Chairman, Search Committee, Division of Applied Mechanics, Durand Building Room 252, Stanford University, Stanford, CA 94305–4040.

BIOCHEMIST VERTEBRATE PHYSIOLOGIST

East Carolina University, Department of Biology has openings for two full-time tenure-track faculty positions at the **ASSISTANT PROFESSOR** level beginning August 19, 1993. The successful applicants will be expected to develop fundable research programs, train graduate students, and teach graduate/undergraduate courses in their field of interest.

 Biochemist applicants should have research inter-ests complementary to departmental strengths in aquat-ic science/ecology and molecular biology/biotechnol-ogy; teaching responsibilities include general biochemistrv

2. Vertebrate Physiologist applicants should have re-

2. Vertebrate Physiologist applicants should have re-search interests complementing faculty expertise in aquatic/ terrestrial ecology or population biology; teaching respon-sibilities include general anatomy and physiology. The Department offers B.S. degrees in Biology and in Biochemistry, and M.S. degrees in Biology and in Molecular Biology/Biotechnology; and has 30 faculty, 90 graduate students, and over 500 undergraduate majore majors.

Competitive salary and start-up funds. Applicants should submit curriculum vitae, a brief description of proposed research, and names, addresses, and telephone numbers of three references by February 5, 1993 to: Dr. Wendall E. Allen (biochemist) or Dr. Roger Rulifson (physiologist), Department of Biology, East Carolina University, Greenville, NC 27858–4343. Official transcripts required at time of employment. An Equal Oppor-tunity/Affirmative Action University. Applicants must com-ply with provisions of the Immigration Reform and Control



THE SCRIPPS RESEARCH INSTITUTE

Ph.D. Programs

Macromolecular and Cellular Structure and Chemistry

Chemistry

The Scripps Research Institute will admit 5–10 highly qualified students for the fall of 1993 to begin studies for a Ph.D. program integrating cell and molecular biology with structure and chemistry, and 5–10 students for a Ph.D. program in chemistry.

Candidates for these programs must have earned a bachelor's degree and have a strong background in biology and/or chemistry. Qualified applicants will be asked to visit the Research Institute for an interview. Financial support will be provided to all accepted students.

Individuals interested in applying to either graduate program should contact the Office of Graduate Studies to receive a program brochure and application at:

The Scripps Research Institute Office of Graduate Studies, IMM 21 10666 North Torrey Pines Road La Jolla, CA 92037 TEL: (619)554-8469 FAX: (619)554-6602

These graduate programs are authorized by the California State Department of Education.

An Equal Opportunity Employer

CHAIR DEPARTMENT OF BIOLOGICAL SCIENCES MURRAY STATE UNIVERSITY

The Murray State University College of Science invites nominations and applications for the position of Chair, Department of Biological Sciences. Minimum qualifications include, Ph.D. in a biological science, evidence of excellence in research and success in extramural funding and a commitment to undergraduate teaching. The successful candidate must have an understanding of the teaching, research, and service roles of a regional university and the ability to interact with activities ranging from molecular biology to widlife management.

Murray State University is a regional state supported institution located in western Kentucky. It has an enrollment of 8,000 students and awards bachelor's and master's degrees in biology. There are 15 faculty members, 400 majors and 28 graduate students. Facilities include the Hancock Biological Station on Kentucky Lake which is a focus of departmental activities in the Center for Reservoir Research. The chair serves on the Center's steering committee which provides support for interdisciplinary ecosystem studies.

This is a 12-month tenure track appointment at the associate or full professor level. Salary commensurate with education and experience. Review of applications will begin on January 1, 1993 and continue until the position is filled. Starting date is July 1, 1993. Applications should include curriculum vitae, a statement of research, teaching, and administrative philosophy, and names and addresses of at least three references, and should be sent to:

Dr. Harold Eversmeyer Chair, Search Committee Department of Biological Sciences 1 Murray Street Murray, KY 42071-3306 502/762-2786

Murray State University does not discriminate on the basis of race, color, national origin, sex or handicap in its programs or activities. For further information contact the Murray State University Equal Opportunities Office: 502/762-3155.

A TIME FOR ACHIEVEMENT

Glaxo Inc., one of the largest pharmaceutical companies in the world, has an established record of developing the highest quality prescription medicines for unmet patient needs. Located in Research Triangle Park, NC, the new Glaxo Inc. Research Institute is a premier facility which provides a stimulating environment for scientists working in all aspects of discovery and development. We invite you to join us today in one of the following openings.

SR. SCIENTIST Cancer Research

This opening, within our Cell Biology Department, is for a **MOLECULAR BIOLOGIST/BIOCHEMIST** with experience in the regulation of cell cycle progression in mammalian cells. This individual will develop and lead a research project focusing on **CHECKPOINT CONTROL of the CELL CYCLE** as a potential target for novel cancer chemotherapy. The purpose of this research commitment is to integrate an understanding of cell cycle regulation with that of genomic integrity, DNA repair, and induction of apoptosis.

We seek an energetic individual who possesses excellent leadership ability and can actively collaborate with research teams both inside and outside the company. A Ph.D. or M.D. with a minimum of 3 years relevant post-doctoral experience and a proven record of achievement is required. Please refer to position title and Job # 9125B116-SC on all resumes.

SR. SCIENTIST Diabetes Research

This opening, within our Cell Physiology & Biophysics Department, will join our multi-disciplinary team of scientists in the investigation of physiologic glucose control and innovative molecular targets for the therapy of Diabetes Mellitus.

Ph.D. in the sciences, or M.D., and 2+ years relevant experience is required.

Please refer to position title and Job # 9115B006-SC on all resumes.

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ARTHROPOD SYSTEMATIST. ASSISTANT PROFESSOR, tenure-track (80% research, 20% teaching). Applicants must have: a Ph.D. in entomology, evolutionary biology, or a related field, with specialty in arthropod systematics; experience and interest in applying molecular/biochemical techniques to the systematics of a group of insects, mites, or ticks; and a strong background in cladistic theory. Submit a letter stating research and teaching goals, curriculum vitae, reprints, and the names of three references to: Dr. J. D. Harper, Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695–7613 by 1 April 1993. NCSU is an Equal Opportunity Employer and operates under Affirmative Action policy.

FACULTY POSITION IN CELL BIOLOGY

The Department of Cell Biology and Neurosciences of The University of Texas Southwestern Medical Center at Dallas seeks applications for a tenure-track position at the level of ASSISTANT PROFESSOR. Applicants must have a relevant Ph.D. or M.D. degree, appropriate postdoctoral training, and show evidence of firm commitment to a career in independent research. We are particularly interested in considering creative and highly motivated individuals who wish to apply contemporary cell and molecular techniques to elucidate at the cellular level the fundamental mechanisms of human disease. Responsibilities will also include teaching of medical and graduate students after the first year of employment. Send curriculum vitae, a brief description of proposed research, and three letters of reference to: Richard G. W. Anderson, Ph.D., Department of Cell Biology & Neuroscience, UT Southwestern, 5323 Harry Hines Boulevard, Dallas TX 75235–9039. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF PATHOLOGY, TENURE-TRACK. We seek candidates with strong disciplinary training in pathology, and research skills who can make significant contributions in cellular and molecular pathobiology. Existing programs include oncology, transgenic mice as models of human disease, inflammation, growth factors, and lysosomal storage disease. Teaching, resident training, and hospital service pathology commitments are minor but important requirements. The D.V.M. degree and excellent research credentials are required; ACVP Board Certification or eligibility is desirable. Salary is competitive; the benefits package is comprehensive. Starting date is flexible and informal inquiries are encouraged. Send curriculum vitae, three letters of reference, and statement of career goals to: Dr. Philip N. Bochsler, Pathobiology Search Committee, Department of Pathobiology, College of Veterinary Medicine, University of Tennessee, Knoxville, TN 37901–1071, Telephone: (615) 974-8234. The University of Tennessee is an Equal Opportunity/ Affirmative Action Employer.

CLINICAL CHEMISTRY—ASSISTANT PRO-FESSOR OF CHEMISTRY: The Department of Chemistry at Cleveland State University (CSU) invites applications for a tenure-track faculty position in Clinical Chemistry at the Assistant or Associate Professor level. A Ph.D. or equivalent in Clinical Chemistry, Chemistry, or Biochemistry and eligibility for certification by the American Board of Clinical Chemistry is required. Responsibilities will include teaching undergraduate chemistry courses and graduate clinical chemistry courses and establishment of a competitive, externally fundable research program in some area of Clinical Chemistry at the undergraduate and Ph.D. levels. The Clinical Chemistry program at Cleveland State is affiliated with the Metro-Health Medical Center and the Cleveland Clinic Foundation and has CONACC accreditation at the Ph.D. level. The position is subject to state funding availability for the Fall of 1993. The deadline for applications is three references, transcripts of undergraduate and graduate academic work, and a description of research plans to: Dr. Thomas W. Flechtner, Chair, Clinical Chemistry Search Committee, Chemistry Department, Cleveland State University, East 24th & Euclid Avenue, Cleveland, OH 44115. Equal Opportunity Employer, M/F/D. CSU provides reasonable accommodation for individuals with disabilities.

POSITIONS OPEN

FACULTY POSITION

THE MEDICAL UNIVERSITY OF SOUTH CAROLINA, CARDIOLOGY DIVISION OF THE DEPARTMENT OF MEDICINE, invites applications for a full-time tenure-track research appointment at the level of ASSISTANT PROFESSOR. Applicants must hold a Ph.D. or M.D. degree and have had at least two years of postdoctoral training. Applicants should have a demonstrated background in the area of cellular signal transduction mechanisms with particular emphasis on activation of protein kinases and identification of specific protein kinase substrates. Preference will be given to those applicants who have a strong interest and experience in signal transduction pathways pertinent to growth and development of cardiac muscle. The successful candidate will be expected to join a highly collaborative basic research group, all of whom have a primary interest in mechanisms of hypertrophy in adult myocardium. Interested applicants should send curriculum vitae, a description of research experience and interests, and the names of at least three references to: Dr. George Cooper, IV, Cardiology Division of the Department of Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425–2221. FAX: (803) 723-1535. The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

EUKARYOTIC MOLECULAR GENETICIST

The Department of Biology at Northeastern University invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. The successful candidate will be expected to establish an independent research program in the biology of lower eukaryotic systems, using molecular biology as a tool, and to have a commitment to teaching at both the undergraduate and graduate levels. The position is contingent upon the availability of institutional funding. Send curriculum vitae, pertinent reprints, research plan, and names and addresses of four references by February 1, 1993 to: Chairperson, Faculty Search Committee, Department of Biology, Northeastern University, 360 Huntington Avenue, Boston, MA 02115. Northeastern University is an Equal Opportunity/Affirmative Action/Title IX University.

The Anatomy Department of the Medical College of Ohio is reopening its search for a tenure-track or tenured **NEUROBIOLOGIST** studying neural organization at the molecular, cellular, or system level. Applicants for an **ASSISTANT PROFESSORSHIP** should have demonstrated the ability to establish an independent and funded research program. Applicants for more senior appointments should have ongoing and funded programs. Teaching responsibilities will be in histology. The Medical College and the Department of Anatomy offer excellent core facilities, very competitive salaries, and the names of three to four references by February 15, 1993 to: Dr. John T. Wall, Faculty Search Committee, Department of Anatomy, Medical College of Ohio, Toledo, OH 43699–0008. Equal Opportunity Employer.

VISITING ASSISTANT PROFESSOR BIOLOGY DEPARTMENT

St. Lawrence University's Department of Biology has an opening for a visiting Assistant Professor with training in animal physiology. Teaching responsibilities include courses in General Animal Physiology and Vertebrate Physiology and two other courses commensurate with the candidate's training. A strong commitment to teaching in a liberal arts environment is essential. Ph.D. preferred. Send curriculum vitae, a statement of teaching interests and three letters of recommendation to:

Dr. Thomas Budd Biology Department St. Lawrence University Canton, NY 13617

Completed applications will be considered beginning January 15, 1993.

St. Lawrence University is committed to fostering multicultural diversity in its faculty, staff, student body and programs of instruction. As an Equal Opportunity/Affirmative Action Employer, we specifically encourage applications from women, persons of color, and the disabled.

POSITIONS OPEN

The University of San Diego (USD), Department of Biology, invites applications for a tenure-track position in MOLECULAR PLANT SYSTEMATICS at the ASSISTANT PROFESSOR level beginning in September 1993. Teaching responsibilities include a course with laboratory in plant systematics and in molecular biology, and an introductory biology course for majors. USD is an independent Catholic university whose primary aim is teaching excellence. Active scholarship by the faculty is considered essential to this aim, and the candidate is expected to maintain an active research program that has the potential for undergraduate involvement. Teaching experience is desirable. Women and minorities are particularly encouraged to apply. Submit curriculum vitae, a brief description of teaching philosophy and research interests, and names and addresses of three references by 15 January 1993 to: Chair, Department of Biology, University of San Diego, 5998 Alcalá Park, San Diego, CA 92110–2492. USD is an Affirmative Action/ Equal Opportunity Employer.

FACULTY POSITIONS. The Biology Department of Boise State University has two ASSISTANT PRO-FESSOR, tenure-track positions for Fall 1993. Ph.D. required, postdoctoral experience desired. BOTA-NIST—Broadly trained, with research experience in desert or grassland plant biology. Teaching duties include rotation through an introductory level nonmajors biology course and general botany, plus an upper division/graduate level course. The successful candidate is expected to establish an active research program. QUANTITATIVE VERTEBRATE ECOLOGIST— To teach graduate level courses in biometry and applicant's area of expertise, plus an upper division biology course. The successful candidate must develop an extramurally funded research program, and direct and support M.S.-level graduate students in Raptor Biology. Submit curriculum vitae, photocopies of graduate/

Submit curriculum vitae, photocopies of graduate/ undergraduate transcripts, description of teaching/research interests, up to three reprints, and names and addresses of three references by 15 January 1993 to: Search Committee, Biology Department, Boise State University, Boise, ID 83725. Equal Opportunity/Affirmative Action Employer.

AQUATIC MICROBIOLOGIST MOLECULAR BIOLOGIST

The Marine Sciences Research Center, SUNY Stony Brook seeks a microbiologist with interest in ecological geochemical or physiological processes involving heterotrophic or autotrophic microorganisms in aquatic systems. The individual must demonstrate expertise in application of molecular biological techniques. Entry-level tenure-track ASSISTANT PROFESSOR position available September 1993. Salary commensurate with experience. Send résumé, statement of interests and plans for future research, selected reprints, and arrange to have at least three letters of reference sent by 15 February 1993 to: Nicholas Fisher, Chair, Microbiology Search Committee, MSRC, State University of New York, Stony Brook, NY 11794–5000. The University at Stony Brook is an Equal Opportunity/Affirmative Action Educator and Employer.

PLANT STRUCTURE AND DEVELOPMENT UNIVERSITY OF GEORGIA DEPARTMENT OF BOTANY

The Department of Botany, University of Georgia, invites applications and nominations for a tenure-track **ASSISTANT PROFESSOR** position. Candidates conducting independent research in the broad areas of functional morphology, the evolution of plant developmental patterns, and/or paleobotany are particularly encouraged to apply. The successful applicant will have opportunities to interface with programs in evolutionary biology, ecology and cellular/developmental biology. Teaching responsibilities will include appropriate graduate and undergraduate courses in the areas of plant curriculum vitae, statements of research and teaching interests, reprints, and arrange for three letters of reference to be sent directly to: **Dr. William E. Friedman**, **Chair, Search Committee, Department of Botany**, **University of Georgia, Athens, GA 30602.** Closing date is February 1, 1993. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer*.

BEHAVIOURAL PHARMACOLOGY and in vivo MICRODIALYSIS or VOLTAMMETRY

Sandoz Research Institute Berne Ltd., part of the international research organisation of Sandoz Pharma Ltd., is currently seeking to fill two academic positions in its CNS Research Department:

- 1. An <u>in vivo</u> **behavioural pharmacologist** to develop new models of mental disorders and to participate in the development of innovative drugs.
- 2. A **scientist** to develop <u>in vivo</u> microdialysis and/or voltammetry for use in characterisation of new drugs, both in terms of their action on transmitter systems and their pharmacokinetic properties (e.g. BBB permeability).

For both positions a Ph.D., relevant post-doctoral experience, a creative flexible approach and the ability to work in an interdisciplinary environment are required. Technical support is available. Both positions are located in Berne/Switzerland, a pleasant University town close to the Alps.

Informal information can be obtained by telephoning Dr. David Lowe on (0)31 - 46 63 33 (Berne / Switzerland).

Formal applications, including curriculum vitae, publications list, details of research experience and the names and addresses of two referees should be sent to

Sandoz Research Institute Berne Ltd., attn. Mr. U. Kaufmann, P.O. Box, CH-3001 Berne / Switzerland



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Kathleen Hall - NMR and biochemical studies of RNA and RNA:protein complexes.

Dewey Holten - Photophysics of light-harvesting proteins. Tim Lohman - Thermodynamics of DNA protein

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George Rose - Structural motifs in biological macro-

molecules; protein folding and assembly. Jacob Schaefer - NMR methods in solids applied to

polymeric and biological materials. John Taylor - Sunlight-induced mutagenesis; protein

folding; anti-cancer/viral drug design.

For additional information please write to Rosemary Garagnani, Biology & Biomedical Sciences, Campus Box 8226, 660 S. Euclid Ave., St. Louis, MO 63110-1093: or call 800-852-9074.



An opening is now available for a tenured or tenure-track position in the **Department of Biochemistry and Molecular Biology**. This position is highly competitive with regard to laboratory space, start-up funds and salary. Rank will be commensurate with qualifications.

The department seeks an individual with outstanding research achievements and potential to complement a broadly based program in the general areas of macromolecular structure and function, gene expression, and molecular cell biology. Available facilities include DNA/RNA synthesis, molecular modeling, transgenic mice, tissue culture, and monoclonal antibody production.

Please send curriculum vitae, statement of research interests, and names of three references by December 31 to: Search Committee, c/o Dr. Reid Gilmore, Department of Biochemistry and Molecular Biology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.





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Syntex, an international leader in the pharmaceutical industry, has a commitment to basic and applied research. Toward this end, we devote 30% of our staff and 19% of our profits to R&D. Consider the following challenging opportunities in the San Francisco Bay Area.

Postdoctoral Fellows

Applications are invited for postdoctoral positions to study the biology of lipoxygenases. Lipoxygenases are a family of enzymes involved in inflammation and cardiopulmonary diseases. We are working on both the structural and cellular biology of these medically relevant proteins. One position is open for structure-function studies. Another position is open for developing and studying transgenic mice. Active collaborations exist with UCSF Biochemistry Department and the Cardiovascular Institute. Experience in molecular biology, protein chemistry and/or transgenics is desirable. Principal Investigator: Elliott Sigal.

For consideration, please send your resume to: Syntex, Professional Staffing, Job #MCS11211, Suite A2-130, 3401 Hillview Avenue, Palo Alto, CA 94303. Syntex is an equal opportunity employer committed to the values of a diversified workforce.



ASSISTANT PROFESSOR MICROBIOLOGY

Applications are invited for a tenure-track position in environmental microbiology/microbial ecology. Applicants must have a doctorate in microbiology or related field and postdoctoral experience. Duties will include establishing an independent research program, directing M.S. and Ph.D. students, as well as teaching undergrad-M.S. and Ph.D. students, as well as teaching undergrad-uate and graduate courses in the microbiology program. Appointment begins in August 1993. Completed appli-cations will be reviewed beginning February 15, 1993 and continue until the position is filled. Send curriculum vitae, a statement of research goals and three letters of reference to: Dr. Mary Woodworth, Chair, Depart-ment of Microbiology, Miami University, Oxford, OH 45056. Miami University is an Equal Opportunity/ Affirmative Action Employer Affirmative Action Employer.

The Department of Movement Sciences and Education at Teachers College, Columbia University invites applications for two tenure-track positions. Exercise Science: ASSISTANT/ASSOCIATE

Exercise Science: ASSISTANI/ASSOCIATE **PROFESSOR.** Position requires leadership in develop-ing a new program-emphasis on muscle functions under-lying human movement. Qualifications include compe-tencies in computer-based analysis of EMG signals and in clinical applications of basic research.

Biomechanics: ASSISTANT PROFESSOR. Position requires competencies in kinematic/kinetic analysis of human movement as applied to the study of skill learning, development of neuromotor processes.

Both positions involve teaching graduate courses, maintaining an active research program suitable for external funding, directing doctoral dissertations. Earned doctorate required; postdoctoral experience in research or teaching preferred for Biomechanics, required for Exercise Science position. Candidates must be commit-red to excellence in teaching. To apply, and latter of ted to excellence in teaching. To apply, send letter of interest, curriculum vitae, brief statement of research plans, copies of publications, list of three references to: Dr. William G. Anderson for Biomechanics and to: Dr. Ronald DeMeersman for Exercise Science, Teachers College, Columbia University, New York, NY 10027. Review of applications will begin immediately and continue until the search is successfully concluded. Teachers College is an Equal Opportunity/Affirmative Action Employer.

THE DEPARTMENT OF PSYCHOLOGY, NORTHWESTERN UNIVERSITY: invites applica-tions for a tenure-track ASSISTANT PROFESSOR a Neuroscience to begin September 1993. Interested candidates should send a statement of research interests, curriculum vitae, copies of recent publications, and at least three letters of recommendation to: Cognitive Neuroscience Search Committee, Department of Psy-chology, Northwestern University, Evanston, -IL 60208-2710. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF PHYSIOLOGY AND BIOPHYSICS UNIVERSITY OF WASHINGTON

The Department of Physiology and Biophysics invites applications for a tenure-track position as assistant pro-fessor. The most important quality we seek is the potential for excellent, original, and independent research. We welcome applicants with research interests in any area of physiology, from the molecular through the systems physiology, from the molecular through the systems level. The Department provides an attractive environnever, the Department provides an attractive environ-ment for research: there are interdepartmental graduate programs in biomedical sciences, and a potential for collaboration with faculty both within and beyond our Department. The appointee will be expected to teach graduate and professional students. Under unusual circumstances the appointment may be made at the rank of associate professor. Before February 22, 1993, applicants should submit curriculum vitae, a statement of research interests and goals, and the names of three references interests and goals, and the names of three references who should be asked to send letters of recommendation directly to: Dr. Albert J. Berger, Chair of Search Committee, Department of Physiology & Biophysics, School of Medicine, SJ-40, University of Washing-ton, Seattle, WA 98195. The University of Washington is an Equal Opportunity/ Affirmative Action Employer, and women and/or minorities are stemative used to apply

are strongly urged to apply.

POSITIONS OPEN

UNIVERSITY OF REGINA DEPARTMENT OF BIOLOGY

A tenure-track position at the **ASSISTANT PRO-FESSOR** level in the area of **INVERTEBRATE BI-OLOGY** is available, subject to funding. The field within the general area of invertebrate biology is open. Postdoc-toral experience is required. Candidates must have a strong commitment to research and teaching at the undergraduate and graduate levels (M.Sc. and Ph.D.). Research will be encouraged by start-up funds and reduced teaching loads. The teaching duties will consist of participation in courses at the introductory level and advanced courses in the area of specialization

Applicants shall send curriculum vitae and outline of research interests. They shall arrange for letters of reference from four referees. All correspondence is to be addressed to: Invertebrate Biologist Search Commit-tee, Department of Biology, University of Regina, Regina, Saskatchewan, S4S 0A2, Canada. The closing date for application is 31 January 1993. The University of Regina is committed to employment equity. In accordance with Canadian immigration require-equity. In accordance with Canadian immigration require-tions and account of decision citizers and

ments. this advertisement is directed to Canadian citizens and permanent residents.

UNIVERSITY OF REGINA DEPARTMENT OF BIOLOGY

A tenure-track position at the **ASSISTANT PRO-FESSOR** level is available. The position will be filled from one of the following fields: plant biology or mycol-ogy or developmental genetics (of animals). Postdoctoral experience is required. Candidates must have a strong commitment to research and teaching at the undergrad-uate and graduate levels (M.Sc. and Ph.D.). Research will be encouraged by start-up funds and reduced teaching loads. The teaching duties will consist of participation in courses at the introductory level and advanced courses in the area of specialization.

Applicants shall send curriculum vitae and outline of research interests. They shall arrange for letters of refer-ence from four referees. All correspondence is to be addressed to: Search Committee, Department of Biology, University of Regina, Regina, Saskatchewan, S4S 0A2, Canada. Closing date for applications is January 31, 1993.

The University is Regina is committed to employment eauity. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

GROSS ANATOMIST

Department of Surgery, University of California, San Diego (UCSD): Tenure-track ASSISTANT PROFES-Drego (UCSD): Tenure-track ASSISTANT PROFES-SOR position open to teach gross anatomy at the UCSD School of Medicine beginning July 1, 1993. This is mainly a teaching and research position, with some administrative responsibilities. It requires interest and ability to teach in the Medical School Core Gross Anat-omy course and to offer and participate in elective teaching. The candidate must have a Ph.D. in anatomy and research competence of a degree to allow indepenteaching. The candidate must have a Ph.D. in anatomy and research competence of a degree to allow indepen-dent productivity and effective cooperative undertakings with others. Send curriculum vitae and names of three academic references to: N.A. Halasz, UCSD Medical Center, 200 West Arbor Drive, San Diego, CA 92103-8401. Salary per published UC scale. Equal Opportunity/Affirmative Action Employer. Closing date February 28, 1993.

FRAMINGHAM STATE COLLEGE, DEPART-FRAMINGHAM STATE COLLEGE, DEPART-MENT OF BIOLOGY. Two nine-month tenure-track positions at the ASSISTANT PROFESSOR level, to begin Fall 1993. Broadly trained biologists, specializing in (1) non-vascular botany (phycology/mycology) and quantitative ecology or (2) developmental biology/cell biology. Duties: teaching courses in areas of expertise, leading undergraduate research, and participating in the instruction of lower-level biology courses. Ph.D. in an area of Biology at the time of appointment and a strong commitment to undergraduate teaching required; college commitment to undergraduate teaching required; college teaching experience preferred. Send a letter of interest, curriculum vitae, graduate transcripts, and the names of three references by January 31, 1993 to: Dr. J. C. Klaas, Department of Biology, Framingham State College, Framingham, MA 01701. An Equal Opportunity/Affirmative Action Employer seeking to increase the diversity of its workforce. People of color, women, and persons with disabil-ities are especially encouraged to apply.

POSITIONS OPEN

BIOLOGY: Vertebrate Biologist-Tenure-track AS-SISTANT PROFESSOR position in the Department of Biology, to begin Fall 1993. Teaching responsibilities will include courses in Vertebrate Biology and a General Biology course with botany. Pacific University empha-sizes quality teaching, faculty research, and supervision of student research. Ph.D. required. Teaching experience student research. Ph.D. required. Teaching experience highly desirable. Send curriculum vitae and three letters of recommendation to: Dr. Richard Carter, Chairman, Department of Biology, Pacific University, Forest Grove, OR 97116 by January 11, 1993. Affirmative Action/Equal Opportunity Employer.

PHYSIOLOGIST

The Department of Biology at West Georgia College (WGC) invites applications for an **INSTRUCTOR** or **ASSISTANT PROFESSOR** from individuals with ex-Assist ANT PROPERSION from Individuals with experimental pertise in human physiology. This position is available September 1, 1993, pending legislative approval. An M.S. or Ph.D. in biology and commitment to and competence in undergraduate teaching are required. The successful candidate will teach human anatomy and phys-iology, pathophysiology, and general biology. Applicants should send cover letter, résumé, transcripts, and arrange to have three professional recommendations sent to: Dr. Carl Quertermus, Biology Department, West Geor-gia College, Carrollton; GA 30118. Screening will begin on January 15, 1993 and continue until the position is filled. WGC is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR MOLECULAR BIOLOGIST/BIOCHEMIST DEPARTMENT OF BIOLOGICAL SCIENCES UNIVERSITY OF TEXAS AT EL PASO

The University of Texas at El Paso seeks to fill two Ine University of Texas at EI raso seeks to hil two tenure-track positions at the Assistant Professor level. Molecular biologists are sought with research interests in (1) mechanisms of microbial pathogenesis or parasitic diseases, or (2) carcinogenesis/mutagenesis or toxicology. Candidates should have a strong background and interest in teaching biochemistry as well as a working knowledge of modern methods of molecular biology. Send résumé, statement of research objectives and teach-ing philosophy and listing of three references (name, address, telephone) by February 1, 1993 to: BBRC Coordinator, Department of Biological Sciences, The University of Texas at El Paso, El Paso, TX 79968-0519. UTEP does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in employment or the provision of services.

ASSISTANT PROFESSOR, GENETICS. Department of Biochemistry, University of Alabama at Bir-mingham. Several tenure-track faculty positions are avail-able in 1993. Areas of particular interest include chro-mosome structure and function, transcriptional regulation, RNA processing and control of development in lower and higher eukaryotes; however, outstanding candidates in any area of genetics are encouraged to apply. Successful candidates will teach in graduate and medical/ dental curricula as well as direct active research programs. Please send curriculum vitae, a brief statement of present and future research interests, selected reprints and the and tuture research interests, selected reprints and the names/addresses of three references by January 31, 1993 to: Dr. Tim Townes, Search Committee Chairman, Department of Biochemistry, Schools of Medicine/ Dentistry, University of Alabama at Birmingham, Birmingham, AL 35294. An Equal Opportunity/Affir-mative Action Employer.

The Division of Endocrinology, Department of Medicine, University of Toronto is seeking to recruit scien-tists at the ASSISTANT PROFESSOR level, nontists at the ASSISTANT PROFESSOR level, non-tenure-track stream to establish independent research programs in the molecular and genetic basis of endocrine disorders, including diabetes. Candidates should have a record of successful graduate and postdoctoral training, as evidenced by a competitive publication record. The University of Toronto encourages applications from qualified men and women, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian Immigration Requirements, this advertisement is directed initially to Canadian citizens and permanent residirected initially to Canadian citizens and permanent residents.

Interested applicants should submit a covering letter and curiculum vitae to: Dr. D. Drucker, Department of Medicine, The Toronto Hospital, 200 Elizabeth Street, Toronto M5G 2C4, Canada.

Group Leader

The Biology and Biotechnology Research Program of the Lawrence Livermore National Laboratory is seeking a Senior Scientist to lead a new group specializing in the development of advanced instrumentation for biological research. The Program has several ongoing instrumentation efforts in the areas of flow cytometry, image electrophoresis, analysis, molecular hybridization, and laboratory automation. We are looking for an individual with scientific breadth, imagination. leadership qualities, and ability to develop a stable, well-funded bioinstrumentation group. The successful candidate will likely take a leading role in one or more of these ongoing efforts and might also develop new areas that complement and extend the Program's research. Initial start-up funding can be provided.

This position requires an ability to interact closely with scientists in multiple disciplines, several years experience in instrumentation development, and demonstrated leadership capabilities. Ph.D. or equivalent is required.

The Biology and Biotechnical Research Program offers excellent research facilities and a competitive salary and benefits package. For information about the position contact Phillip Dean at (510) 422-6293. Interested applicants are invited to send their curriculum vitae including references to: Phil Harding. **Professional Employment Division, Lawrence Livermore** National Laboratory, P.O. Box 5510, Dept. A93154BS, Livermore, CA 94551. U.S. Citizenship desired. We are proud to be an Equal Opportunity Employer. M/F/D/V.

University of California Lawrence Livermore National Laboratory

Inflammation Biologists Oncologists

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BASF Bioresearch Corporation is a medical research company developing novel therapies for immunological disorders and cancer. Founded in 1989, we are part of a global enterprise with more than 125 years of dedication to scientific innovation. We are building a major new research facility in Worcester, Massachusetts, which will also provide significant capacity for the production of biopharmaceuticals. At our temporary location in Cambridge, Massachusetts, we have immediate openings for the following professionals:

Animal Pharmacologist

This scientist will establish a research and drug discovery laboratory in the Immunology group. The objective is to develop and utilize animal models in the discovery and evaluation of novel therapeutic drugs for the treatment of autoimmune diseases, septic shock and inflammatory diseases. The animal pharmacologist will join a team of scientists interested in the roles of cytokines and T cells in acute and chronic inflammatory diseases. The primary responsibilities will include the pharmacological, immunological and pathological evaluation of test compounds and biological agents in these models.

A PhD in Immunology, Pharmacology or a related discipline, with at least 2 years postdoctoral experience are required. Experience with *in vivo* models of arthritis, septic shock or inflammatory diseases is essential. Experience in the pharmaceutical industry is desirable. **Dept. AP1**

Cytokine Biologist

This scientist will establish a research and drug discovery laboratory in the Immunology group. The objective is to study the cell biology of cytokine biosynthesis and action, including the discovery and pharmacological evaluation of novel therapeutic drugs for the treatment of autoimmune diseases, septic shock and inflammatory diseases. The cytokine biologist will join a team of scientists interested in the role of cytokines in these diseases. The primary responsibilities will include the utilization of immunological and cell biological techniques to discover and evaluate test compounds and biological agents. This research may include both *in vitro* and *in vivo* models of cytokine production and function.

A PhD in Cell Biology, Immunology, Pharmacology or a related discipline, with at least 2 years of post-doctoral experience are required. Experience with cytokine biology, immunology or pharmacology is essential. Experience in the pharmaceutical industry is desirable. **Dept. CB2**

Molecular Oncologist

This scientist will establish a drug discovery laboratory in the Oncology group. The overall goal of the group is to discover new agents for the treatment of solid tumors. The primary responsibilities of the molecular biologist include the development and utilization of cellular and biochemical assays for the identification and characterization of novel anticancer compounds. A strong focus will be the elucidation of mechanisms of action on the molecular level.

A PhD in Biochemistry, Molecular Biology, Pharmacology or a related discipline with at least 2 years of post-doctoral experience are required. Experience in experimental chemotherapy and/or pharmaceutical industry is desirable. **Dept. MO3**

Research Associate Oncology

This scientist will join a drug discovery laboratory in the Oncology group. Responsibilities include testing of new anti-cancer agents in cellular and biochemical assays.

A BS/MS in Biology or related sciences is required. State-of-the-art tissue culture techniques as well as a good understanding of biological systems are necessary. Dept. RA4

BASF Bioresearch Corporation is a wholly-owned affiliate of BASF Corporation, a Fortune 100 company. Our compensation and benefits program is representative of this leading industrial position. For prompt consideration, please forward resume indicating position of interest, including department number, and salary history to: Pamela Barney, Human Resources Department, BASF Bioresearch Corporation, 64 Sidney Street, Cambridge, Massachusetts 02139. An Equal Opportunity Employer.



TENURE-TRACK FACULTY POSITIONS

The Department of Anatomy at The University of The Department of Anatomy at The University of South Dakota School of Medicine invites applications for two full-time positions at the ASSISTANT or ASSO-CIATE PROFESSOR level starting July 1, 1993. Applicants should have a Ph.D. or M.D. Experience in cell/molecular biology of cytoskeleton and extracellular matrix are desired, but all qualified candidates are strong-ue and apply Areas of research within the ly encouraged to apply. Areas of research within the department include cardiovascular disease, reproductive and developmental biology and neurosciences. Teaching area is negotiable. Salaries and start-up funds are com-petitive. In addition to the School of Medicine, Vermil-lion is the home of The University of South Dakota with an enrollment of over 7000. Housing costs and crime rates are among the lowest in the nation. Review of applicants begins on February 15, 1993 but applicants will be considered until the positions are filled. Submit curriculum vitae, career goals, and names of three refer-ences to: A. Martin Gerdes, Ph.D., Chair, Department of Anatomy, University of South Dakota School of Medicine, Vermillion, SD 57069-2390. The University of South Dakota is an Equal Employment Opportunity/ Affirmative Action Employer. Women and minorities are particularly encouraged to apply.



FACULTY POSITIONS IN OCCUPATIONAL & ENVIRONMENTAL HEALTH SCIENCES

A tenure-track position at the rank of **ASSISTANT**/ **ASSOCIATE PROFESSOR** is available for an individual with a strong experimental background in inhalation-pulmonary toxicology and/or such related disci-plines as biochemistry, cell and molecular biology, im-munology, and pharmacology. The candidate should have a Ph.D. or M.D. degree and a minimum of four to five years of postdoctoral research experience, and will be expected to establish a graduate research program and to participate in the teaching of toxicology and/or industrial hygiene. In addition, a **RESEARCH ASSOCIATE** position is available for an individual with a Ph.D. or M.D. degree, interested in the study of molecular and cellular mechanisms of oxidant-lung injury, inflamma-tion, and repair. Qualified candidates should send curriculum vitae, a concise description of research interests, and the name, address and telephone number of three references to: David J. P. Bassett, Ph.D. (Chairper-son), Department of Occupational & Environmental Health, College of Pharmacy & Allied Health Profes-sions, 628 Shapero Hall, Wayne State University, **Detroit, MI 48202.** Wayne State University is a Affirma-tive Action/Equal Opportunity Employer. Wayne State University—People working together to provide quality service

BOTANY VACANCY: ASSISTANT/ASSOCI-ATE PROFESSOR OF BOTANY. Full-time tenuretrack position to begin September 8, 1993. To teach botany, general biology for majors and non-majors and upper division ecology/environmental electives and a erron production energy Will be a set of the section of the section of the set of the section of the crop production course. Will also manage greenhouse. Doctorate in Botany required. Environmentally oriented plant biologist with a strong chemistry background is desired. College level teaching experience is preferred. Position is subject to final budgetary approval. Send letter of application, résumé, transcript and name, ad-dress and telephone number of three references to: Director of Personnel Services, Southwest State University, Marshall, MN 56258. File review will begin on January 8, 1993 and continue until filled. Southwest State University is an Equal Opportunity Educator and Employer.

IMMUNOLOGIST. Physician/Scientist with strong commitment to research in basic immunology for faculty position at ASSISTANT, ASSOCIATE or PROFES-SOR level in the Department of Pediatrics, University of Arizona. Applicants should be able to sustain independent Arizona. Applicants should be able to sustain independent research with external funding. Pediatric and clinical im-munology training is desirable but will consider non-clinical Ph.D. applicants. Opportunities exist locally for collaboration in basic immunology. Review of applications will begin November 1, 1992 and continue until position is filled. Contact: Michael J. Schumacher, M.D., Depart-ment of Pediatrics, University of Arizona Health Sci-ences Center, Tucson, AZ 85724, Telephone: 602/ 626-6055. The University of Arizona is an Equal Employ-ment Opportunitiv/Afirmative Action Employer. ment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANIMAL ECOLOGY/BEHAVIOR Harvard University

The Department of Organismic and Evolutionary Biology at Harvard University invites applications for an ASSISTANT or ASSOCIATE PROFESSORSHIP in the general fields of animal ecology or behavioral biology. We encourage applications from a broad range of subdisciplines, including empirical and theoretical approaches to behavior, behavioral ecology, population biology and/or community ecology. The candidate will be expected to teach and interact with undergraduates and graduate students.

Applicants should send by January 15, 1993, curriculum vitae, statement of research interests, and the names, addresses and telephone numbers of at least three referees to: Professor Naomi E. Pierce, Museum of Compar-ative Zoology, Department of Organismic and Evo-lutionary Biology, 26 Oxford Street, Cambridge, MA 02138.

Harvard University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minority groups.

The Department of Cell Biology of Baylor College of Medicine invites applicants for tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level. We are seeking candidates with expertise in the general area of cellular signalling cascades or membrane trafficking, with an emphasis on molecular or genetic approaches. Candidates should be committed to excellence in research and training, and have demonstrated the ability to develop an innovative and independent re-search program. Interested persons should write to: Dr. Lutz Birnbaumer, C. C. Bell Research Professor of Cell Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, including curriculum vitae

With a list of publications and a description of research experience and interest. Women and minority candidates are encouraged to apply. Baylor College of Medicine is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE PROFESSOR PATHOBIOLOGY

The Department of Comparative and Experimental Pathology has a tenure-track position open for an experratiology has a tender-tack position open of an exper-imental pathobiologist at the rank of associate professor beginning July 1, 1993. Applicants should have a Ph.D. degree or D.V.M./Ph.D. degrees and a record of accom-plishment in research. Individuals with research proplishment in research. Individuals with research pro-grams focused on molecular pathogenetic mechanisms in infectious disease, inflammation, or immunology will be given preference. Excellent departmental research re-sources are available including laboratory space, technical support, research equipment, and adjoining research facilities and collaborative investigators in the Health Science Center and in the Institute of Food and Agricultural Sciences. The successful candidate will be expected to establish a productive research program and to partic-ipate with other faculty in the graduate education pro-grams in experimental pathology and infectious diseases. Applicants should submit a letter of intent, curriculum Applicants should submit a letter of intent, curriculum vitae and the names of three references before January 31, 1993 to: Dr. William L. Castleman, Chairman, Department of Comparative and Experimental Pathology, College of Veterinary Medicine, P.O. Box 100145, University of Florida, Gainesville, FL 32610–0145. The University of Florida is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN BEHAVIORAL NEUROSCIENCE: The Department of Psychiatry at the University of Massachusetts (UMass) Medical Center is seeking applicants for a tenured position at the level of **FULL PROFESSOR** to direct a laboratory in behavioral neuroscience. The successful candidate will be expected to establish an extramurally funded research program in behavioral neuroscience for postdoctoral and clinical fellows. The applicant should have a strong background in neuroanatomical, neurochemical, and im-aging techniques. It is desirable that applicants have a publication record and an active interest in the neurobiology of aggression. Current extramural funding is re-quired. Please submit curriculum vitae, description of research interests, and three letters of recommendation by 15 January 1993 to: Paul Appelbaum, M.D., Professor and Chairman of Psychiatry, UMass Medical Center, 55 Lake Avenue North, Worcester, MA 01655. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MICROBIAL IMMUNOLOGIST

The Department of Microbiology and Immunology, Indiana University School of Medicine, invites applications for a tenure-track faculty position available July 1, 1993, AS-SISTANT to FULL PROFESSOR. At least two years of postdoctoral experience required. Should complement active research programs in molecular immunology, molecular biology of viral pathogenesis and bacterial pathogenesis. Particular attention will be given to applicants with research concerning the influence of microbes or their products on the immune system. Successful candidates are expected to develop or maintain an imaginative research program and to develop or maintain an imaginative research program and to have a commitment to teaching. Applicants should send curriculum vitae, a statement of their research plans and a list of three references to: Dr. D. C. Bauer, Professor and Chairman, Department of Microbiology and Immunol-ogy, Indiana University School of Medicine, 635 Barn-hill Drive, Indianapolis, IN 46202–5120. Screening of applicants will begin February 1, 1993 and continue until position is filled. Indiana University is an Equal Opportunity/ Afirmative Action Fundover Affirmative Action Employer.

WHOLE-PLANT PHYSIOLOGIST Harvard University

The Department of Organismic and Evolutionary Biology at Harvard University invites applications for an ASSISTANT or ASSOCIATE PROFESSORSHIP in the area of plant physiology. We are looking for a candidate who utilizes physiological, cellular and/or mo-lecular techniques in the study of whole plant physiology. The candidate will be expected to teach and interact with undergraduate and graduate students. Applicants should send curriculum vitae, statement of

research interests, representative reprints, and arrange for three letters of recommendation to be sent by January 15, 1993 to: Professor F. A. Bazzaz, Department of Organ-ismic and Evolutionary Biology, The Biological Labo-ratories, 16 Divinity Avenue, Cambridge, MA 02138. Harvard University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and

minority groups.

PROFESSOR AND CHAIR

Department of Biochemistry and Molecular Biology

As part of an expansion of the basic sciences, the School of Medicine of the Oregon Health Sciences University, Portland, Oregon, invites applications from candidates in any area of biochemistry. The candidate must have a distinguished record of scientific achievement as well as proven leadership and administrative skills. Applicants should send curriculum vitae and names, addresses and telephone numbers of three references to: Margie Sasser, Oregon Health Sciences University, L102, 3181 SW Sam Jackson Park Road, Portland, OR 97201-3098. Deadline: January 15, 1993. Oregon Health Sciences University is an Affirmative Action/Equal Opportunity Employer.

COLLEGE LABORATORY TECHNICIAN to start February 1, 1993. Duties: Service laboratory courses (particularly biochemistry), maintenance and working knowledge of instrumentation is essential. Prepare and assist in lecture demonstration experiments, prepare laboratory reagents, distribute apparatus and equipment, etc. Requirements: A high school diploma plus a combination A sequencies of the sequence o

Candidates should submit curriculum vitae, back-ground, and three letters of recommendation to: **Profes**sor Reuben L. Baumgarten, Chair, Chemistry Depart-ment, Lehman College (CUNY), 250 Bedford Park Boulevard West, Bronx, NY 10468. An Equal Opportunity (M/F), Affirmative Action Em-

ployer and members of protected classes.

More than 150,000 people paid to see your ad in **SCIENCE**. Classified Advertising Department Telephone: 202-326-6555 FAX: 202-682-0816 National Institute of Allergy and Infectious Diseases National Institutes of Health

MOLECULAR VIROLOGIST

Postdoctoral position is available in the Laboratory of Infectious Diseases, (1) to conduct studies on dengue viruses and other medically important, insect-borne flaviviruses at the molecular level, (2) to elucidate mechanisms of gene expression, polyprotein processing and viral replication, (3) to analyze genetic determinants of virulence using chimeric viruses derived from cloned DNA, and (4) to develop live virus and subunit vaccine strategies for prevention of viral infections. Applications are invited from individuals having a doctoral degree in Medicine, Microbiology, Virology or Pathobiology. Previous experience with molecular techniques is preferred. Salary will be commensurate with experience.

Qualified and interested candidates should send curriculum vitae and names and addresses of three (3) references to:

Ching-Juh Lai, Ph.D. Head, Molecular Viral Biology Section NIH, NIAID Laboratory of Infectious Diseases, NIAID National Institutes of Health 9000 Rockville Pike Building 7, Room 234 Bethesda, MD 20892 Fax: (301) 402-0524



NIH is an Equal Opportunity Employer

Genentech, Inc., a leader in the field of biotechnology, has two opportunities available in our Metabolism/Cell Biology group.

Scientist

We're looking for a biochemist/cell biologist with interest and experience in endocrinology or neurotrophic factors to be part of a newly formed research group studying the metabolism and biotransformation, cellular fate, and mechanism of action of candidate protein therapeutics. The focus of this lab will be to support the selection and development of candidate molecules through both *in vitro* and *in vivo* studies with contributions to regulatory filings as required. The qualified candidate will have a PhD in Biochemistry, Cell Biology or Molecular Pharmacology and 2+ years' postdoctoral experience. Refer to Dept. #SWBH.

Postdoctoral Fellow

The focus of this research will be the metabolism and mechanism of action, both cellular and in biological matrices, of an anti-integrin antibody therapeutic currently under consideration. The qualified candidate will have a PhD in Biochemistry, Cell Biology or Immunology. Refer to Dept. #SWJF.

Our extensive benefits package includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities, free health club membership and an employee stock purchase plan. Send your resume indicating appropriate Dept. # to: Genentech, Inc., Human Resources, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.





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Research Scientist II

(Post Doctoral)

This individual will, with minimal supervision, develop and perform analyses of proteins and glycoprotein-derived carbohydrates and develop or revise analytical techniques as required for research.

Candidates need a Ph.D. in Analytical Chemistry or Analytical Biochemistry with some experience in at least one of the following areas: analytical protein chemistry, carbohydrate analysis or mass spectrometry. Other factors to be considered include experience with mass spectrometry of peptides or proteins and/or experience with glycoproteins/recombinant proteins.

Burroughs Wellcome Co. offers competitive salaries and comprehensive benefits. We also offer the advantage of working in North Carolina's Research Triangle Park, one of the country's leading areas for scientific research, with the cultural and recreational opportunities of the Raleigh/Durham/Chapel Hill area nearby. To apply, please send your resume, indicating Position #64307-29 in your cover letter, by December 28, 1992, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other opportunities at Burroughs Wellcome Co., call our Job Information Line at **(919) 248-8347.**



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ASSISTANT/ASSOCIATE PROFESSOR

The Department of Microbiology and Molecular Genetics and the UMDNJ-New Jersey Medical School is seeking outstanding scientists (Ph.D. or M.D.) for ten-ure-track ASSISTANT or ASSOCIATE PROFES-SORSHIPS. Successful applicants will be expected to establish a strong basic research program and to partici-pate in medical and graduate school teaching. The de-partment is located in a large medical complex, has excellent facilities, and a vigorous interactive faculty. We are most interested in candidates investigating any aspect of molecular genetics.

send complete curriculum vitae including future re-search plans and arrange to have three letters of recom-mendation sent to: Dr. Lynn S. Ripley, Faculty Search Committee, Department of Microbiology and Molec-ular Genetics (B), UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103-2714. Send complete curriculum vitae including future re-

BOTANY: The Department of Biology of The College of Staten Island of the City University of New York seeks candidates for an anti-cipated tenure-track position as ASSISTANT or ASSOCIATE PROFESSOR of Botany, to start September 1993. Preferred area of research is plant ecology. Ph.D. required, postdoctoral experience and grant activity desirable. Outstanding candidates in all areas of botany will be considered. Candi-dates should have experience in undergraduate teaching and curriculum development. The successful applicant is expected to be committed to teaching, scholarship, and service, and to establishing an independent research program at the college. Send curriculum vitae and names program at the college. Send curriculum vitae and names and addresses of three references by January 4, 1993 to: Professor Jacqueline LeBlanc, Chair, Search Com-mittee, The College of Staten Island/CUNY, Room B-202, 715 Occan Terracc, Staten Island, NY 10301. Beginning in June 1993 the College will occupy a new 204-acre campus, located in the center of Staten Island, with outstanding facilities and equipment. Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR OF BI-OLOGY. The Biology Department at Gallaudet University invites applications for a full-time tenure-track faculty position (assistant or associate professor). The candidate would be expected to teach undergraduate courses in anatomy and physiology, cell biology, and general biology. A Ph.D. (equivalent degrees such as M.D., D.S., etc., will be considered) and university teaching experience is preferred. The candidate must be willing to learn sign language and attend a paid 10-week summer orientation program at Gallaudet. Applicants should submit a letter of introduction with a

brief statement of research interests and career plans, curriculum vitae, and the addresses and telephone numbers of three references to: Jane Dillehay, Ph.D., Chairper-son, Biology Department, Gallaudet University, 800 Florida Avenue, N.E., Washington, DC 20002. Review of applications will begin January 15, 1993 and will continue until the position is filled. Gallaudet University is an Equal Opportunity/Affirmative Action Employer.

PROGRAM DIRECTOR FOR WEATHER RESEARCH

The Office of Oceanic and Atmospheric Research/ National Oceanic and Atmospheric Administration is seeking applicants for the position of Program Director for Weather Research. This is a Senior Executive Service Position, pay range \$90,000 to \$112,000. Duties: the incumbent serves as the senior Program Director for development of a NOAA-wide program in weather research. As such, he/she develops and advocates policies research. As such, he/she develops and advocates policies with other federal agencies to further the interests of weather research nationally and to benefit NOAA mis-sions in weather forecasts and warnings. Serves as spokesperson for the U.S. Weather Research Program to improve the utilization of NOAA's new observing sys-tems and for NOAA responsibilities to the Committee on Farth Environment Science.

tems and for NOAA responsibilities to the Committee on Earth Environment Science. This position is located in Silver Spring, MD. Appli-cants must submit an application package by December 24, 1992 to: National Oceanic and Atmospheric Ad-ministration, Personnel Division—OA2/SSMC1/ Room 3102, 1335 East-West Highway, Silver Spring, MD 20910. For a listing of additional qualifi-cation requirements and additional information call Deb-ier School (201) 7(3):0530. Befor to Vacancy #: NOAA bie School (301) 713-0530. Refer to Vacancy #: NOAA 92-12DS. DOC is an Equal Opportunity Employer.

POSITIONS OPEN

Department of Neurobiology and Anatomy CHAIR

The Department of Neurobiology and Anatomy at the Bowman Gray School of Medicine of Wake Forest University is seeking a senior investigator with an established research program in cellular, molecular, or developmental neuroscience to serve as Chair of a strong research-oriented department in the University. The suc cessful candidate will join a growing department of 20 faculty with research interest in neurobiology, as well as in developmental, vascular and cell biology. The University has an active graduate training program. In addition to a Ph.D. program in anatomy and neurobiology, the department participates in two interdisciplinary Ph.D. ar genetics (over 50 faculty) and molecu-lar genetics (over 20 faculty). This is an opportunity for an innovative individual to participate in the expansion of a University-wide effort to chieve excellence in neu-roscience research. The department is also noted for its excellence in teaching and a significant commitment to medical education is a priority. Please send curriculum vitae and names of five references to:

B. Todd Troost, M.D. Chair, Department of Neurology The Bowman Gray School of Medicine of Wake Forest University Medical Center Boulevard Winston-Salem, NC 27157-1078 Equal Opportunity/Affirmative Action Employer.

USDA—Agricultural Research Service, Arthro-Doba-Aginchitural Research Service, Arthro-pod-borne Animal Disease Research Laboratory, Laramie, Wyoming (located on the campus of the Uni-versity of Wyoming) seeks an experienced scientist as a VETERINARY MEDICAL OFFICER, (GM-12/13/ 140 cm distance of the sector o 14/) to do research on arboviral diseases and their animal hosts. Incumbent will develop an independent program and participate in team projects with virologists, geneti-cists, and entomologists. Candidates must have a D.V.M. or equivalent degree, plus one year of professional veterinary experience in the area of the position equivalent to the next lower grade level in the Federal government. A Ph.D. degree is highly desirable. Knowledge of virology, Ph.D. degree is highly desirable. Knowledge of virology, microbiology, immunology, molecular biology, and pa-thology, and skill in surgical procedures are required. Knowledge of arbovirology, epidemiology, host immune responses, entomology, and skill in experimental design and statistical analysis are desirable. Senior positions require a strong publication record. Salary: \$38,861 to \$70,987 per annum commensurate with experience. For further information contact: Dr. Walter J. Tabachnick, Research Leader, Telephone 307-766-3600. For ap-plication procedures forms call or write to: Cathleen plication procedures/forms, call or write to: Cathleen Enuton, USDA, ARS, PD, 6305 Ivy Lane, Room 318, Greenbelt, MD 20770–1435. Telephone: 301-**313**, Greenoet, MD 207/0–1453. Telephone: 301-344-3138. Applications must contain specific responses to the knowledge criteria for the position. Applications must be postmarked on or before February 15, 1993. AN EQUAL OPPORTUNITY EMPLOYER.

DIRECTOR

The Great Lakes Center for Environmental Research and Education (CERE) at SUNY College at Buffalo invites nominations and applications for Center Director. This is an Associate/Full Professor position and the This is an Associate/ruli Professor position and the Director will be expected to develop and increase the ongoing environmental research and educational pro-grams housed within the Center. The successful candi-date will hold a Ph.D., and be required to demonstrate a vigorous research program, excellence in teaching and substantial experience in administration, and have appro-priate credentials in a relevant discipling.

Substantial experience in administration, and nave appro-priate credentials in a relevant discipline. Candidates should submit a letter of interest and curriculum vitae to: Dr. Joyce Swartney; Chair, Search Committee; Center for Environmental Research and Education B-2; State University of NY College at Buffalo; 1300 Elmwood Avenue; Buffalo, NY 14222. Creating on Lonword 15 1003 and costinue Screening will begin on January 15, 1993 and continue until a successful candidate is identified. The Director will take office no later than September 1, 1993, with an earlier assumption of duties preferred. Salary competi-tive. Applications from minorities and females are especially invited. SUNY College at Buffalo is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

CHEMIST/RESEARCH MANAGER

A progressive Midwest company manufacturing spe-cialty animal feed ingredients seeks a Research Manager claity animal feed ingredients seeks a Kesearch Manager to direct research concerning its products in antioxidants, carotenoids, feed additives, animal feed flavors and sur-factants. The successful candidate will possess an ad-vanced degree in chemistry with a record of creative science. Experience in GC, GC-MS, HPLC and FT-IR helpful. This is a position for a hands-on laboratory chemist two also anicors management of durantic tech chemist who also enjoys management of dynamic tech-nical staff members. U.S. citizenship required. Kemin is a non-smoking environment. Job offer is

conditional on passing a physical including a drug screen. Send résumé detailing relevant experience to: Dr. C. E. Nelson, VP of Research and Development, Kemin Industries, Inc., P.O. Box 70, Des Moines, IA 50301. An Equal Opportunity Employer.

THE AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS

ASPP invites applications for two positions. We are a Washington-based international scientific and technical association established to encourage research and technical ing in the plant sciences. Our annual budget is \$3 million.

In the part of the second seco

funding agencies. The coordinator prepares news releases and other materials about advances in the plant sciences and on policy affecting the Society. Assists ASPP in establishing goals and priorities. The successful candidate should have a degree in the biological sciences and experience in public relations. The candidate must demexperience in public relations. The candidate must dem-onstrate ability to communicate effectively in person and in writing. For either position, send résumés, names of references, and salary requirements by January 18, 1993 to: ASPP Search Committee, Attention Mrs. D. Croft, 15501 Monona Drive, Rockville, MD 20855– 2768. All replies are confidential. ASPP is an Equal Opportunity Employer. Women and members of minority around are used to apply. groups are urged to apply.

CHAIR

Department of Molecular Microbiology & Immunology

The School of Medicine of the Health Sciences Center of the University of Missouri announces a search for the Chair of the Department of Molecular Microbiology & Immunology. Responsibilities include recruitment and retention of faculty, education of medical students, training of graduate students and fellows, and strengthening of research.

The position is to be filled by July 1, 1993 and requires an individual of high energy and creativity who has a productive record of academic accomplishments in modern molecular basic science. Applications from minorities and females are particularly welcomed. Direct inquiries to: Herbert S. Goldberg, Ph.D. Associate Dean for Re-search and Academic Affairs, University of Missouri School of Medicine, MA204 Medical Sciences Build-ing, Columbia, MO 65212.

DIRECTOR, Cytogenetics Laboratory. The Massa-chusetts General Hospital seeks a strong leader for our expanding cytogenetics laboratory, which will include both prenatal screening and tumor analysis. A vigorous research program and molecular biology experience are highly desirable. Certification by the American Board of Medical Genetics in Cytogenetics is essential. The position will carry an appropriate faculty appointment at Harvard Medical School. Recruitment of additional faculty is planned. Contact: Robert B. Colvin, M.D., Chief, Pathology Service, MGH, at Telephone: (617) 726-2966. We are an Equal Opportunity/Affirmative Action Employer.

Upjohn RESEARCH OPPORTUNITIES Biology & Toxicology Associates

The Upjohn Company seeks Research Associates to join our multidisciplinary team in developing improved pharmaceutical treatments for cancer, AIDS, and other important neurological, cardiovascular and metabolic diseases.

Biology Associate

Selected candidate will assist in conducting, evaluating, and reporting laboratory and farm animal toxicology studies to support safety and product registrations. Responsibilities will include dosing, meticulously observing animal behavior, obtaining biological samples, necropsy, maintaining records, and drafting reports in compliance with GLP regulations.

Qualifications include a BS in animal sciences, biology, Guaincations include a BS in animal sciences, biology, or closely related field, experience in laboratory and farm animal care & dosing and clinical observations. Experience conducting toxicology studies highly desirable. Must be familiar with recording & reporting study data on computers. Please refer to **Position #133** in your cover letter.

Toxicology Associate

Selected candidate will study the toxicologic effects of novel drugs and chemicals, particularly those with therapeutic or toxicologic targets in the nervous system. Our goal is to understand mechanisms of neurotoxicity and to develop improved methods for detection of neurotoxicity, in order to assess safety of new pharmaceutical compounds.

Qualifications include a BS/MS in toxicology neuroscience, biochemistry, cell biology or a related field, and at least 2 years research experience with in vitro techniques and animal handling. Please refer to Position #130 in your cover letter.

These positions both enjoy an excellent salary and benefits package. For prompt consideration, please forward your resume (including Position Code) and salary history to: THE UPJOHN COMPANY, Human Resources Dept., 7000 Portage Road, Kalamazoo, MI 49001. Equal Opportunity Employer.

IMMUNOLOGY AND NEUROBIOLOGY **GEORGIA STATE UNIVERSITY**

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

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

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

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

Lhe quality of R&D depends on the quality of the resources.

BIOTECHNOLOGY-CELL BIOLOGY

Become a part of our multi-disciplinary team where our current focus of research is on Cytokine Biology and the discovery of lymphokine antagonists. Applicant should have a PhD with 0-4 years' postdoctoral or industrial experience. Research in Cell Biology is required; a background in Cellular Immunology is highly preferred. Experience in Molecular biology is a plus.

Senior Scientist

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

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

> We offer highly competitive salaries commensurate with your experience and education, superior benefits, and all the challenge and growth potential an international industry leader can offer. For confidential consideration, please send your c.v., indicating salary requirements, to: Mr. George Czuba, Human Resources, Dept. DD92-13S, Schering-Plough Research Institute, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

The science of success



Schering-Plough Research Institute

Associate Chief of Staff for Research and Development-The Department of Veterans Affairs Medical Center, Highland Drive, Pittsburgh, PA is currently seeking a physician/ scientist, for the position of Associate Chief of Staff for Research and Development to give leadership to the medical research program and to strengthen further its research program. This medical center provides primary and tertiary care for veterans with psychiatric disorders, such as schizophrenia, post traumatic stress disorder, dementia, substance abuse and cognitive disorders. Management supports research endeavors. Medical licensure in any state and board certification or eligibility are required. The successful candidate is expected to continue his/her own research program as well as possess the necessary qualifications for an academic appointment in the appropriate department at the University of Pittsburgh School of Medicine. There are active ongoing funded research programs in schizophrenia, psychophysiology, post traumatic stress disorder, substance abuse and cognition. In addition to a schizophrenia research unit, psychophysiology, sleep and biochemistry laboratories, there is interest in increasing research in aging, substance abuse and brain imaging (PET scan and MRI). Qualified candidates interested in applying for the position of Associate Chief of Staff for Research and Development should send curriculum vitae, including bibliography and the names of at least three references to the Chairman of the Search Committee, Daniel P. Van Kammen, M.D., Ph.D., Professor of Psychiatry, Chief of Staff (11), VAMC, Highland Drive, Pittsburgh, PA 15206.



Medical College of Wisconsin

The Biophysics Research Institute at the Medical College of Wisconsin invites applications for the position of Associate Professor or Professor of Biophysics. This position is at the senior faculty level and is expected to attract candidates with a nationally-funded research program that relates well to the Institute's research emphasis in functional MRI and ESR. Candidates should have a strong interest in teaching and research mentoring of biophysics graduate students, and in collaborating with basic and clinical scientists in research, utilizing the Institute's extensive ESR, MRI and MRS facilities, including a Bruker 3T 60cm bore MR system. Women and minorities are encouraged to apply. Send curriculum vitae, representative publications, and three names of references to:

James S. Hyde, Ph.D. Director Biophysics Research Institute Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53226 Equal Opportunity/Affirmative Action Employer M/F/D

POSITIONS OPEN

DIRECTOR, Bone Marrow Transplantation Program. Tulane University School of Medicine and Tulane Cancer Center are seeking applicants at the Associate Professor/Professor level to lead the research and clinical program in Bone Marrow Transplantation. Candidates are expected to have an established, funded research program in clinical and/or experimental transplantation biology and be capable of developing and managing the research and clinical aspects of the program with the Sections of Pediatric and Medical Hematology/Oncology. Candidates must be Board Certified in either Pediatrics or Medicine and have at least three years of experience in a bone marrow transplant unit accredited by the National Marrow Donor Program. An attractive package of salary and development resources is available. Research space in the new Cancer Center will be ready for occupancy in June of 1993. Interested applicants should send curriculum vitae and names of three references to: James J. Corrigan, Jr., M.D., Vice Dean, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112–2699. Applications will be accepted until position filled. *Affirmative Action/ Equal Opportunity Employer*.

COLLECTION/DATABASE MANAGER for mollusk collection of 10 million specimens, associated database, and curatorial staff of 4 to 6. We seek a B.A. or M.A. in natural or computer science with managerial skills and familiarity with databases and Novell networks. Experience with natural history collections preferred. Send curriculum vitae and names of three references to: Dr. Gary Rosenberg, Malacology Department, Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103–1195. Telephone: 215-299-1033. Equal Opportunity/Affirmative Action Employer.

The Department of Microbiology, The University of Iowa College of Medicine, invites applications for tenure-track FACULTY POSITIONS at a rank commensurate with education and experience from outstanding cantidates who are working in molecular virology and immunoparasitology. All applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience, and a strong record of research accomplishments. Successful applicants are expected to establish an extramurally funded research program. Participation in the Department's teaching programs is also expected. The Department of Microbiology consists of 28 faculty members with research programs in immunology, virology, pathogenic bacteriology, imrunology and parasitology. The Department is under the leadership of a new head and the research facilities of the department are currently undergoing complete renovation. Applicants should send curriculum vitae, a statement of Microbiology, The University of Iowa, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION

The Department of Biology at Indiana University– Purdue University at Indianapolis (IUPUI) has a postdoctoral position available in the area of yeast molecular biology. Candidates should be experienced in standard recombinant DNA techniques. Special consideration will be given to those applicants who have experience with membrane lipids. Applicants should send a statement of research experience, complete curriculum vitae, and the names of three references to: Dr. Martin Bard, Department of Biology, IUPUI, 723 West Michigan Street, Indianapolis, IN 46202–5132. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITIONS available immediately at UCSF to study TIMP-3 and its role in celltransformation. Structure/function relationships of this new member of the metalloprotinase inhibitor family will be investigated using molecular and biochemical techniques. Applicants should have a strong background in biochemistry, cell biology or molecular biology. Please send or FAX: (415-476-2744) cover letter, curriculum vitae and names, addresses and telephone numbers of three references to: Dr. Susan P. Hawkes, Department of Pharmacy, University of California, San Francisco, CA 94143–0446.

SCIENCE • VOL. 258 • 11 DECEMBER 1992

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION

The Cardiovascular Division of the Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts is recruiting an electrophysiologist (M.D. or Ph.D.) interested in analysis of ion channels relevant to cardiac function. The successful candidate will be expected to lead his/her own strong research program, as well as to interact with other basic scientists in the Cardiovascular Division. The academic level is flexible and will depend on the experience and qualifications of the applicant. Applicants should send curriculum vitae and names of three potential references to: Dr. T. W. Smith, Cardiovascular Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. The Brigham and Women's Hospital is an Equal Opportunity Employer. Applications from women and underrepresented minorities are encouraged.

FACULTY POSITIONS

SUNY Health Science Center at Brooklyn is seeking qualified applicants for tenure-track positions in the Department of Microbiology and Immunology. Candidates should have at least two to three years of postdoctoral experience; rank is open depending on qualifications. Preference will be given to candidates with a strong record of research in molecular genetics, immunology or virology. The candidate is expected to develop an externally funded research program and to become involved in medical and graduate education. Salaries and start-up funds are highly competitive. The department offers a stimulating scientific environment with excellent laboratory facilities. Send bibliography and a summary of research accomplishments to: Dr. William T. McAllister, Chairman, Department of Microbiology and Immunology, SUNY Health Science Center at Brooklyn, Box 44, Brooklyn, NY 11203–2098.

Equal Opportunity/Affirmative Action Employer.

FACULTY SCIENTIST MASSACHUSETTS GENERAL HOSPITAL Immunology—Molecular Biology—Glycoprotein Biochemistry

The Department of Pathology, Massachusetts General Hospital seeks qualified M.D. or Ph.D. faculty-level investigator to join the Division of Pathology Research. Candidates should have a proven record of independent research and funding. The position will include appropriate faculty appointment at Harvard Medical School. Candidates with experience in Immunology, Molecular Biology, Glycoprotein Biochemistry will be most competitive.

Please send letters of inquiry including references to: James T. Kurnick, M.D., Massachusetts General Hospital, Pathology Research—7th Floor, 149 Thirteenth Street, Charlestown, MA 02129. Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer.

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

Growing multidisciplinary research institute invites applications for three junior, mid or senior level FAC-ULTY POSITIONS from individuals interested in advancing CROET's state-mandated mission in research, education and outreach. Open to interactive, team-oriented, funded scientists focused on (1) chemical perturbation of gene expression in aging, carcinogenesis, development or neurodegeneration and (2) occupational or environmental behavioral neurotoxicology. Salaries competitive with 50%+ self-generated. Send curriculum vitae, career goals, one publication and list of three references by January 15, 1993 to: Dr. P.S. Spencer, Director and Senior Scientist, CROET, OHSU, 3181 SW Sam Jackson Park Road, L606, Portland, OR 97201–3098. OHSU is an Equal Opportunity/Affirmative Action Employer.

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Gliatech, Inc., a growing pharmaceutical company dedicated to understanding and utilizing the unique properties of neuroglial cells in treating nervous system disorders, has several openings for research scientists within our expanding Alzheimer's Disease research program. These positions are at the Ph.D., M.S. and B.S. levels, and scientists with training in the areas of molecular neuroscience, pharmacology, biochemistry, or cell biology are encouraged to apply. Prior research in the neurological sciences is highly desirable, but outstanding candidates from other disciplines will be considered. Applicants should be highly motivated investigators who can integrate into a vigorous research team dedicated to the development of therapeutics to slow the progression of Alzheimer's disease.

Gliatech is located in suburban Cleveland in close proximity to Case Western Reserve University and the Cleveland Clinic. Its collaborative interactions with scientists and clinicians at these and other academic institutions provides an exceptional intellectual environment. Gliatech offers a competitive salary and benefits package, and our location allows access to affordable housing as well as an array of cultural and sports activities. Qualified candidates are encouraged to submit their curriculum vitaes to: **Gliatech Inc., Corporate Recruiting, 23420 Commerce Park Rd., Cleveland, OH 44122.**

Forensic Toxicologist

The **Research Triangle Institute**, a not-for-profit research organization located in Research Triangle Park, NC, has an opportunity for a Forensic Toxicologist to work in the National Laboratory Certification Program.

We seek an individual with a Ph.D. or equivalent in an appropriate scientific discipline with experience in the technical direction of a forensic urine drug testing laboratory. Background must include experience in data review/ certification of GC/MS and immunoassay data, the development of quality control and chain-of-custody procedures, laboratory inspections, and technical writing. Responsibilities will include:

- · Review of laboratory inspection reports
- Review of SOPs, chain-of-custody documentation, data, and other laboratory information
- Preparation of documents associated with laboratory inspections
- Assisting in recommendation of laboratory certification status

RTI offers competitive salaries, excellent benefits, 3 weeks of vacation, and an interesting working environment at our 180-acre campus. To apply, send your resume together with copies of transcripts and the names of references to: **Research Triangle Institute, Office of Human Resources** (BOC-E), PO Box 12194, RTP, NC 27709-2194.

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<u>/RT</u>

Antibody Scientists

Pfizer is a lot more than a pharmaceuticals and healthcare industry leader. It's a group of people dedicated to discovering, developing and marketing innovative pharmaceuticals, animal health and specialty chemical products that improve the quality of life worldwide. As a Fortune 100 company, Pfizer is committed to continuing its remarkable growth by investing close to a billion dollars annually in research and development.

Pfizer currently has a number of openings in its Central Research Division laboratories for individuals with a PhD, MS or BS who are well versed in all aspects of monoclonal and polyclonal antibody production, purification, and utilization. These individuals will form a core facility for the production of antibody reagents to support the various drug discovery efforts of Central Research.

The successful PhD candidate will have knowledge of *in vivo* models, routes of immunization, antigen preparations and adjuvants needed to achieve useful antibody production. Should also have an extensive background in traditional as well as more experimental cell fusion techniques and hybridoma manipulations. Previous experience in antibody characterization, affinity studies, and isotyping is desirable.

The prospective assistants (BS/ MS degree) should be trained in relevant aspects of *in vivo* manipulations, including injections, dissections and bleeding procedures. Experience in cell fusion techniques, cell cloning, and general tissue culture is expected. Those experienced in the use of computer technology for catalog and inventory needs are urged to apply.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plans, pension plan and relocation assistance to this southeastern Connecticut shoreline community.

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



Central Research Bringing science to life.



Senior Professionals Applied Environmental Research

The South Florida Water Management District is a 16-county regional agency responsible for the management of water resources in the most urbanized area of Florida. The agency has direct responsibility for environmental research and management for the Kissimmee River, Lake Okeechobee and over 1 million acres of Everglades. With a staff of more than 1,500 and a budget exceeding \$200 million, our agency addresses issues involving environmental protection/enhancement, water supply, flood control and water quality protection. At the District, applied environmental research is the foundation for sound resource management decision making.

We seek two Senior Environmental Scientists to work on applied research problems concerning the aquatic resources of South Florida, including the Everglades, Lake Okeechobee, Kissimmee River and estuarine ecosystems. Successful candidates will supervise and conduct research on a variety of environmental problems in the South Florida region. Ideal candidates should have a strong research background in ecology and environmental science, particularly applied aquatic ecology and water resources management. Demonstrated record of research accomplishment through publication is required, and experience in advanced statistics or ecological modeling would be a plus. Ability to work in multi-disciplinary teams, to plan and budget research projects, and to communicate scientific issues to both technical and lay audiences are desired qualities.

A Ph.D. degree in an environmental science or related field with aquatic emphasis is required. At least 8 years post-doctoral experience in wetlands ecology, limnology, water quality analysis, hydrological/ecological modeling or environmental management is sought.

We offer the opportunity to be involved in important research in applied science and to influence the future of South Florida's environment. You will also find a highly progressive professional environment with a team approach to solving complex environmental problems. In addition to competitive compensation, excellent benefits and the opportunity for continuing professional development, our employees enjoy the many benefits of South Florida living with a sub-tropical climate, exceptional year round recreational opportunities and favorable tax advantages. For information contact, Dr. Nicholas Aumen at (407) 687-6601 or Dr. Garth Redfield at (407) 687-6611 or send resume including social security number to: Linda Starr, Human Resources Division, Re: S/121192/SP, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416. We are an equal opportunity employer M/F/D/V and a drug-free, smoke-free workplace.

South Florida Water Management District

When we talk about the environment, we mean business.

Marketing Manager

Bio-Rad Laboratories is a multinational leader and innovator in the development and manufacture of high quality products – chemicals and instruments – for life science researchers and clinical diagnostic professionals.

The Clinical Diagnostics Group is looking for a Marketing Manager – DNA Diagnostics. We seek a person to identify and champion technologies and/or products that will lead to commercial successes. You will work with the entire Diagnostic Group as well as with our Life Science Group. An advanced degree in molecular biology coupled with marketing experience and an understanding of both life science technologies and the diagnostics market, combined with the energy to put it all together would be ideal.

We are looking for a truly excellent person to join our team. The task will be challenging, exciting and present real growth opportunities. If you feel that you are ready for this challenge, please send your resume, including salary history to: Bio-Rad Laboratories, Dept. 497, 4000 Alfred Nobel Dr., Hercules, CA 94547. Or FAX: Attn: Bob Hall, 510/724-5024. EOE M/F/D/V.

BIO-RAD Bio-Rad Laboratories



THE COMPETITION DEADLINE IS FEBRUARY 16, 1993

The BFGoodrich Company and the National Invention Center are seeking student applicants to compete in the 1993 BFGoodrich Collegiate Inventors Program. This highly visible national awards program recognizes student inventors, their advisors and institutions for their contributions and inventiveness.

Open to any full time student at a college or university in the U.S., this showcase competition rewards student achievements in patent development with awards of \$5,000, \$2,500 to their advisors, and a patent seminar for the institution.

Call Rose Heintz (216) 762-4463 for application information.



The BFGoodrich Collegiate Inventors Program Administered by the National Invention Center 80 W. Bowery, Suite 201 Akron, Ohio 44308 • (216) 762-4463

Research Associate TRANSGENIC ANIMAL PROGRAM

Amgen is an innovative, rapidly growing leader in the research and development of human therapeutics through applied biotechnology. Our continuing success has created an excellent opportunity for a versatile, experienced individual to oversee a challenging transgenic program.

The successful candidate will provide technical assistance, coordinate transgenic services, supervise transgenic technicians and consult/collaborate on research projects involving transgenic animals. Requirements include 4+ years applicable experience in molecular biology and transgenic animal technology, previous experience managing a transgenic program, excellent written and verbal skills, meticulous record keeping, microinjections, DNA analysis, and breeding management. Master's degree in related life sciences discipline and experience with embryonic stem cells, non-mouse models and cryopreservation highly desirable.

Amgen offers a very competitive compensation and benefits package in addition to a stimulating work environment. If you have the necessary qualifications, send your resume to: Amgen Inc., Staffing Department (Mail Code 10-1-A-411), Job Code #S-228-1, Amgen Center, Thousand Oaks, CA 91320-1789. Amgen is an equal opportunity employer.



Principals only, please.

Molecular Biosystems, Inc. (MBI), a leader in the development and manufacturing of contrast agents for medical imaging, including ultrasound, CT, and MRI is seeking a strong candidate to join our expanding preclinical team.

Associate Scientist Preclinical

Responsibilities include the initiation, design and execution of preclinical ADME Studies in support of product development.

Successful candidate must have a PhD in Pharmacokinetics (or related field) with 3+ years postdoc industrial experience in drug metabolism, IND's, NDA's, and animal studies. This position reports to the Director of Preclinical Studies.

We offer competitive salaries, a comprehensive benefits package, and a pleasant working environment. Qualified candidates should submit their résumé with salary history to: **Molecular Biosystems, Inc.**, Human Resources Department A228-93, 10030 Barnes Canyon Road, San Diego, CA 92121. Job Hotline: (619) 452-7393 x411.



Postdoctoral Scientist Opportunities In Receptor Structure Function

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research and development, has exciting opportunities for two postdoctoral scientists to investigate structure/ function relationships of G-protein coupled receptors.

Macromolecular Sciences

The postdoctoral scientist will join an ongoing multidisciplinary effort to investigate the structure and ligand interactions of bioactive peptide receptors.

Requirements include a Ph.D. in a relevant field with experience/interest in molecular biology (gene expression and mutagenesis) as applied to membrane protein structure/function studies. Expertise in either protein chemistry, receptor biochemistry, or fluorescence spectroscopy is desired. Publication of results is strongly encouraged. (Job #HO543)

Molecular Genetics

As a member of a multidisciplinary group engaged in research on CNS receptors, this individual will focus on structure/function relationships of ligand and G-protein interactions with serotonin receptors.

Requirements include a Ph.D. in a relevant biological science with experience/interest in molecular biology. Expertise in receptor biology or protein chemistry with a background in neuroscience is preferred, and experience with *in situ* hybridization or immunocytochemistry is desired. Publication of results is strongly encouraged. (Job #HO541)

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/ relocation package, as well as a stimulating and challenging work environment. For confidential consideration, please submit your C.V., indicating the appropriate job #, and the names of three references, to: SmithKline Beecham Pharmaceuticals, Senior Employment Administrator, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



POSTDOCTORAL POSITIONS

BACTERIAL PATHOGENESIS—Postdoctoral positions are available to investigate the molecular basis of syphilis and Lyme disease pathogenesis. The research will utilize a variety of contemporary molecular technologies and cellular immunologic approaches to investigate components of *Treponema pallidum* and *Borrelia burgdorferi* that contribute to immunopathogenesis and/or protective immunity. These positions offer the opportunity to carry out research in an attractive and dynamic research environment. Candidates should send curriculum vitae and the names and addresses of three references to: Dr. Michael V. Norgard, Department of Microbiology, U. T. Southwestern Medical Center, 5323. Harry Hines Boulevard, Dallas, TX (USA) 75235. U. T. Southwestern Medical Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MOLECU-LAR VIROLOGY OF HEPATITIS B VIRUSES. Applicants should have a Ph.D. with training in Molecular Biology and/or Virology. The research project, based on previous studies (*J. Virol.* 65:2381–2392, 1991), will investigate the role of Topoisomerases (major emphasis on Topoisomerase I) in the integration and replication of hepadnaviruses. Albert Einstein College of Medicine is located in a quiet, safe, residential neighborhood of the North Bronx with easy access to Manhattan and Westchester County. Send curriculum vitae and names of three references to: Dr. Charles E. Rogler, Department of Medicine, Marion Bessin Liver Research Center, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study activation and desensitization kinetics of N-methyl-Daspartate (NMDA) and/or nicotinic acetylcholine receptors. Qualified applicants have some experience with whole-cell or single-channel recording. Send curriculum vitae and names of three references to: Dr. Barry Pallotta, Department of Pharmacology, UNC-CH, Chapel Hill, NC 27599–7365. An Equal Opportunity/ Affirmative Action Employer.

TWO POSTDOCTORAL POSITIONS

(1) Dr. Timothy C. Hall, transformation and regeneration of rice. A major responsibility will be to introduce genes conferring insect resistance. Candidates must have demonstrated expertise in plant tissue culture and will preferably have experience producing and analyzing transgenic plants. Familiarity with molecular techniques is highly desirable. This position is available for a minimum of two years and the salary will be commensurate with experience. (2) Dr. Jim Golden, genetics and molecular biology of cyanobacteria. Projects include the isolation and study of genes involved in heterocyst differentiation and the regulation of nitrogenfixation genes. Experience with molecular techniques is essential. Applicants for either position should have a strong publication record and good communication skills. Please send curriculum vitac, statement of research interests, and three letters of recommendation to the appropriate person named above at: Department of Biology, Texas A&M University, College Station, TX 77843–3258.

POSTDOCTORAL POSITION. Available to study cellular mRNA distribution, transport, and the effects of viral protein(s) on these processes. Various molecular techniques will be used, including *in situ* hybridization, and cell organelle fractionations. Previous experience in cell culture, DNA-mediated transformation, and a strong background in molecular techniques is desirable. Send curriculum vitae and bibliography to: Dr. Vincent C. Bond, Department of Biochemistry, Morehouse School of Medicine, 720 Westview Drive S.W., Atlanta, GA 30310–1495. FAX: (404) 752-8443.

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to: FAX NUMBER: 202-682-0816

POSITIONS OPEN

POSTDOCTORAL POSITION (ENTRY LEV-EL) in cancer immunology available. Experience in humoral and cellular immunology and standard molecular biology techniques desired. Please send curriculum vitae and three letters of recommendation to: Dorothee Herlyn, D.V.M. Associate Professor, THE WISTAR INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to study peptide-ligand specificity using phage display libraries and novel bacterial constructs, as well as possible implications for drug design, jointly in the labs of M. Gefter and E. Signer. Experience in molecular biology and either microbial genetics or biochemistry required. Send curriculum vitae and three references to: Dr. E. Signer, Department of Biology, Room 56-445, MIT, Cambridge, MA 02139. Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MOLECU-LAR GENETICS available to study the structures, regulated expression and roles in development and human genetic diseases of collagen and protein kinase genes recently cloned in this laboratory. Molecular biology experience required. Additional cellular and biochemical skills desirable, but will train. Send curriculum vitae and names of three references to: Dr. Daniel S. Greenspan, Department of Pathology and Program in Cell and Molecular Biology, University of Wisconsin, 1300 University Avenue, Madison, WI 53706.

NIH TRAINING PROGRAM Postdoctoral Positions in Cardiovascular Physiology

The Department of Physiology at Jefferson Medical College, Thomas Jefferson University, offers a postdoctoral training program in physiology and pathophysiology of cardiovascular disorders. Research areas include studies on myocardial ischemia-reperfusion injury; phospholipids and eicosanoids in the regulation of endothelial cell function; molecular basis of smooth muscle contraction; role of Gr_proteins in signal transduction mechanisms; endothelial dysfunction, neutrophil migration, and role of adhesion molecular biology of ion channels; regulation and the endothelial cells in circulatory and pulmonary disorders. Emphasis will be placed on cellular and molecular approaches to these problems. Faculty participating in this NIH Training Program include Drs. K. H. Albertine, T. M. Butler, J. T. Flynn, M. H. Gee, R. Horn, A. M. Lefer, are invited to apply to: Dr. Allen M. Lefer, Professor and Chairman, Department of Physiology, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107–6799. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE. Endocrine and molecular bases of altered neuroendocrine, ovarian, and pregnancy functions during reproductive aging. Experience in hormone assays, immunocytochemistry, Northern blot or *in situ* hybridization analyses preferred. Salary range: \$25,000 to \$30,000. Please send curriculum vitae and names of three references to: Dr. Philip LaPolt, Department of Anatomy and Cell Biology, UCLA School of Medicine, Los Angeles, CA 90024, FAX: (310) 825-2224. *Affirmative Action/Equal Opportunity Employer*.

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR GENETICS/ONCOGENESIS

Tufts-New England Medical Center. Several funded positions currently available for qualified candidates with M.D. or Ph.D. degrees. Experience in molecular biology required. Applicants should send curriculum vitae and three letters of reference to: T. Krontiris, Box 245, New England Medical Center, 750 Washington Street, Boston, MA 02111.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE to work on the transcriptional regulation of genes encoding extracellular matrix proteins. Experience in molecular biology and cell culture desirable. Salary commensurate with qualifications and experience. The University of Texas Health Science Center is an Equal Employment Opportunity/Affirmative Action Employer. Send curriculum vitae and the names of three references to: Dr. Jeffrey Kreisberg, Department of Pathology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284–7750.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately in molecular virology to study pathogenic mechanisms of Simian Immunodeficiency Viruses (SIV) under the direction of Dr. Jonathan S. Allan. A Center for AIDS Research consists of investigators currently funded in multidisciplinary areas of vaccine development, chemotherapeutics, pathogenesis, and molecular biology. Candidates are expected to have a Ph.D., D.V.M. or M.D. and training in molecular cloning and DNA sequencing. Annual salaries range between \$23,691 and \$33,280, commensurate with relevant experience. Interested individuals should send curriculum vitae and the names, addresses and telephone numbers of three references to: **Personnel Manager (243), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228–0147**. An Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITION IN MOLECU-LAR BIOLOGY. Full-time position available immediately to study the regulation and role of the fatty acid metabolizing cytochrome P450 gene family in carcinogenesis, signal transduction, and human disease. Experience in molecular biology necessary. Competitive salary and fringe benefits. Submit curriculum vitae, letters of recommendation and research papers to: Office of Human Resources, c/o Dr. James P. Hardwick, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, OH 44272. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW. Ph.D. (cell biology and/or molecular biology) wanted to join research group evaluating the regulation by calcium and vitamin D of keratinocyte proliferation and differentiation. Send curriculum vitae and three references to: Daniel Bikle, M.D., Ph.D., Veterans Administration Medical Center (111N), 4150 Clement Street, San Francisco, CA 94121.

UNIVERSITY OF WINDSOR GREAT LAKES INSTITUTE FOR ENVIRONMENTAL RESEARCH POSTDOCTORAL FELLOWSHIPS GREAT LAKES RESEARCH

The Great Lakes Institute for Environmental Research at the University of Windsor announces the availability of up to five Postdoctoral Fellowship Positions as part of its Great Lakes research program. Candidates should be able to contribute to the strengths of the Great Lakes Institute for Environmental Research which include ecotoxicology, ecology, waste water management, environmental modeling, environmental planning/policy development and environmental restoration. Positions are available immediately, and will be open until suitable candidates are appointed. The University of Windsor is committed to employment equity and welcomes applications from Aboriginal Peoples, persons with disabilities and members of visible minorities. Applications from women are particularly encouraged. Applications should include complete curriculum vitae and names of three referees, and be directed to: Dr. G. D. Haffner, Interim Director, Great Lakes Institute for Environmental Research, University of Windsor, 304 Sunset Avenue, Windsor, Ontario N9B 3P4.

GRADUATE STUDENT ASSISTANTSHIPS— PH.D. PROGRAM IN BIOTECHNOLOGY—The Department of Microbiology, Immunology and Parasitology at Cornell University seeks candidates for Graduate Student Assistantships in a Biotechnology Ph.D. Program. The program emphasizes research on viral and parasitic diseases and immunology. Citizens and nationals of the U.S.A. who are graduates of relevant undergraduate programs, as well as those with M.D., D.V.M. or equivalent degrees, are encouraged to apply. Successful applicants will have an exemplary academic record an be highly motivated. Applications, including curriculum vitae and the names and addresses of two references, should be sent to: Dr. Roger J. Avery, Department of Microbiology, Immunology & Parasitology, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853–6401: Screening of applicants will begin immediately and will continue until the positions are filled. Telephone inquiries are welcome: (607) 253-3400. Cornell is an Equal Opportunity/Affirmative Action Employer.



Assistant/Associate PROFESSOR The Department of

Biological Sciences at St. John's University in New York is continuing to expand a sizeable group of energetic, interactive faculty working in the general area of Cell and Molecular Biology. Two tenure-track positions starting Fall 1993 offer competitive salary and start-up funds,

supportive atmosphere, and attractive work environment. Ph.D. & postdoctoral experience, research productivity commensurate with faculty rank, potential to establish an extramurally-funded research research program (Assistant Professor) or record of research funding (Associate Professor), and interest in teaching undergraduates as well Ph.D. and M.S. students are required. Teaching responsibilities include either undergraduate microbiology or developmental biology, and a graduate course in any appropriate area. Send c.v., statement of research interests and names of three references to:

Dr. Tim Carter, Chair, Dept. of Biological Sciences St. John's University Jamaica, NY 11439

St. John's University is an equal opportunity employer - M/P.



RESEARCH ASSOCIATES/ SCIENTIST

Discovering New Avenues for Pharmaceutical Therapy...

Cell Therapeutics, Inc. is an innovative biopharmaceutical start-up company focused on the design and commercial development of drugs to treat a variety of significant human diseases. CTI has opportunities in its Molecular Biology and Cell Biology Laboratories. Positions require BA/ BS or MS degrees in a scientific discipline. Ph.D for Molecular Biology Lab helpful.

MOLECULAR BIOLOGIST

You will be responsible for cDNA cloning, DNA sequencing and gene expression. Candidates should possess at least 2 years experience in a molecular biology lab including experience in dideoxy sequencing; cDNA library screening; DNA, RNA and protein blots and PCR cloning. If you are a Ph.D. with post doc experience, your responsibilities will be concomitant with your training. Reference #104.

CELLULAR IMMUNOLOGIST

Qualified individuals will have broad experience in cellular immunology including blood cell preparation, neutrophil and monocyte function, LAK cell assays, experience in T and B cell biology, antibody generation and ELISA development, as well as experience with relevant animal models. Reference #105.

CTI is located in downtown Seattle with views of Puget Sound and the Olympic Mountains. We offer an attractive compensation and benefits package and an environment where you can make a significant contribution to medical technology. For consideration, send or fax your CV to: (Be sure to include the reference #) Human Resources - (Ref.#), Cell Therapeutics, Inc., 201 Elliott Avenue West, Suite 400, Seattle, WA 98119, FAX: (206) 284-6206. Equal Opportunity Employer.



NC · CNRC

NRC – Canada's top R&D organization – helps its industry partners become stronger global competitors. Currently, NRC's Biotechnology Research Institute is looking for those rare people who can help further our record of excellence.

The Biotechnology Research Institute (BRI) is a dynamic research centre committed to pursuing, together with industrial and University Partners, biotechnological research oriented towards industrial application. Created in 1983, the Institute now occupies a 19,000^{m2} facility equipped to reflect the multidisciplinary nature of biotechnology: research and development is conducted in biochemical engineering, molecular genetics and protein engineering.

Research Officer (Montreal, Quebec) Reference: RB-92-39.SCI

YOUR CHALLENGE

Within the Cell Culture engineering Group, you will supervise projects on the development of expression vectors for mammalian cells. The work will consist of construction of vectors and stable cell lines for the production of recombinant protein. The work also involves the engineering of new cell lines able to grow at higher cell densities in bioreactors while producing large quantities of correctly folded recombinant proteins.

YOUR CREDENTIALS

Ph.D. in biology, biochemistry or microbiology. Considerable postdoctoral training in the field of cellular and molecular biology of animal cells with emphasis on cell physiology and gene expression in mammalian cells. Experience in cell culture technology, flow cytometry and protein biochemistry.

Knowledge of both English and French is required. Unilingual persons may apply but must indicate their willingness to become bilingual and demonstrate their potential to achieve the required levels of linguistic proficiency. A security screening will be required.

SALARY RANGE: Commensurate with qualifications.

To explore this opportunity, send your application by January 29, 1993, indicating the appropriate reference number to: Suzanne LaBonté, Personnel Officer, Biotechnology Research Institute, National Research Council of Canada, 6100 Royalmount Avenue, Montreal, Quebec, H4P 2R2.

Vous pouvez obtenir ces renseignements en français.

National Research Conseil national Council Canada de recherches Canada Canada

The U.S. Department of Energy sponsors **GLOBAL CHANGE** DISTINGUISHED POSTDOCTORAL **FELLOWSHIPS**



Research opportunities in technical areas related to four high priority themes: climate modeling and prediction, global water and energy cycles, global carbon cycle, and ecological systems and population dynamics.

- U.S. citizens & permanent resident aliens
- · Doctoral degree within last three years
- Tenable at various university and federal laboratories, including those of DOE and NASA
- Stipend: \$35,000
- Deadline: February 15, 1993

For application materials contact:

Global Change Postdoctoral Fellowships Science/Engineering Education Division Oak Ridge Institute for Science and Education P.O. Box 117 Oak Ridge, TN 37831-0117 (615) 576-9934

DIRECTOR, CLINICAL/REGULATORY AFFAIRS

CYPROS PHARMACEUTICAL COR-PORATION is an early stage biopharmaceutical company focusing on small molecule therapeutics for disorders which involve general ischemia. The Company's initial drug candidates address cerebral ischemia, stroke and sepsis. Two of our product opportunities are moving from pre-clinical development into clinical trials.

We seek a highly motivated individual with experience in the design, implementation and analysis of clinical trials, and in the completion and filing of IND, ANDA, PLA and NDA submissions to the FDA

The ideal candidate will have 5 to 10 years experience in corresponding, consulting and meeting with the FDA in all phases of preclinical and clinical development. A working relationship with the Division of Neuropharmaceuticals at the FDA is desirable.

Please send resume & salary history to:

Howard Jones, Ph.D. Vice President, Drug Development **Cypros Pharmaceutical Corporation** 11211 Sorrento Valley Road, Suite I San Diego, CA 92121, U.S.A.

CPC is an Equal Opportunity Employer

NATIONAL CO.

Clinical Oncology Research Career Development Program

The Arizona Cancer Center of the University of Arizona Health Sciences Center announces a Clinical Oncology Research Career Development Program. Positions are available to train junior faculty in Clinical Research. Candidates will develop the expertise to conduct laboratory-based clinical research and to carry out all aspects of a clinical research program including basic research; preclinical laboratory modeling to test clinically relevant hypotheses; and planning, design, conduct and analysis of clinical trials in diagnosis, prevention and/or treatment of cancer. A multidisciplinary approach linking laboratory and clinical research which integrates several clinical oncology disciplines will be emphasized. At least 75% of the candidate's time will be dedicated to the training program. Up to 5 years of salary and laboratory support is available through a Clinical Oncology Faculty Training Grant. Candidates must have the M.D. or D.O. degree but may also hold the Ph.D. degree and must have completed training in and be board eligible in the oncologic disciplines of medical oncology, radiation oncology, surgical oncology, gynecological oncology or in a related discipline such as pathology. Candidates must be American citizens or permanent residents. Interested applicants should submit a letter outlining their background and interests in clinical oncology research, a CV and bibliography and 3 letters of recommendation including one from a laboratory or clinical research mentor to:

> Raymond Taetle, M.D. Chief of Hematology Arizona Cancer Center 1501 N. Campbell Avenue Tucson, AZ 85724

The University of Arizona is an affirmative action equal opportunity employer. Women and minorities are urged to apply.

Postdoctoral Research Positions Center for Macromolecular Design Texas A&M University

The Center for Macromolecular Design, a component of the Institute of Biosciences and Technology at Texas A&M University, invites applications for postdoctoral research positions. The Center brings together faculty from diverse disciplines, including biochemistry, chemistry, agriculture and life sciences, medicine, and engineering, with a common interest in protein structure and function. The present members of the Center are:

Thomas Baldwin: Mechanisms of protein folding; regulation of transcription; structure and mechanisms of luciferases.

Bruce Dale: Phase equilibrium models for predicting enthalpy and heat capacity changes of protein folding.

Leland Ellis: Protein engineering; structure/function studies of the human insulin receptor.

Paul Fitzpatrick: Mechanisms of pterin and flavin dependent enzymes; effects of phosphorylation on protein structure and function

David Gledroc: Protein-nucleic acid interactions; spectroscopic probes of protein structure; RNA structure.

Scott Linthicum: Antibody-antigen interactions; monoclonal antibodies as probes of receptor structure.

Nick Pace: Protein stability; mechanisms of protein folding. Frank M. Raushel: Enzyme reaction mechanisms; protein folding pathways; protein structure.

To apply, send curriculum vitae and names and addresses of three references to one of the above at Center for Macromolecular Design, Mail Stop 2128, Texas A&M University, College Station, TX 77843. To be considered by more than one member of the Center, please so indicate in a cover letter addressed to Thomas O. Baldwin, Director. TAMU is an Equal Opportunity/ Affirmative Action Employer.

> Located on the coast of Maine next to scenic Acadia National Park, The lackson Laboratory malian genetics.



is a world renowned center for mam-

Scientific Supervisor **Targeted Mutant Resource**

The Jackson Laboratory is expanding its services to the scientific community by establishing a new resource of mutants produced by gene targeting. We are searching for a scientist to supervise this new resource. Duties will include eval-uating new mouse mutants, including comption was and breading identifying genetics, use and breeding; identifying new stocks for consideration; interacting new stocks for consideration; interacting with scientists worldwide concerning stocks; and writing grant applications for funding support. Ph.D. in biological scien-ces is required, coupled with experience in mammalian genetics and related molecu-lar biological disciplines. We also require knowledge of genetic diseases and animal models of disease, experience in supervision of a research service, and experience in budget management.

Qualified candidates should send resume to: Harold Wheeler, Manager of Human Resources, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609, 000 Main Street, Bar Harbor, ME 04609, (207) 288-3371





Organismal Biology

The Department of Biology, in collaboration with the Peabody Museum of Natural History, seeks to fill several positions in **Organismal Biology.** Rank is open. While outstanding scholars/teachers working with any taxa will be considered, we are particularly interested in the fields of botany, entomology, and invertebrate and vertebrate zoology.

We seek individuals compatible with Yale University's existing strengths in molecular ecology, phylogeny, earth history and conservation biology. Successful candidates will be expected to teach in the organismal diversity component of the interdepartmental Organismal Biology Program and to oversee an appropriate division of the Peabody Museum of Natural History.

Please send 3 relevant reprints, 3 letters of recommendation, curriculum vitae, and a short statement by February 15, 1993 to:

Chair, Organismal Biology Search Department of Biology Osborn Memorial Laboratory, Room 201 Yale University P.O. Box 6666 New Haven, CT 06511-8155

Yale University is an Affirmative Action/ Equal Opportunity Employer. Women and members of minority groups are especially urged to apply.

SYMPOSIUM ANNOUNCEMENT

Two full-day symposia presented by The Franklin Institute in conjunction with the presentation of the 1992 Bower Award and Prize for Achievement in Science to Denis Parsons Burkitt, M.D., London, and the Bower Award for Business Leadership to Arnold O. Beckman, Ph.D., Irvine, CA.

THE FUTURE OF R&D

The Role of the Private Sector in Science Technology January 14, 1993

The Critical Challenge of R&D Arnold Thackitay, Ph.D., *Chemical Heritage Foundation* Leon Lederman, Ph.D. Chairman, AAAS

A National Policy for R&D Herbert I. Fusfeld, Ph.D., Center for Science and Technology Policy Jeffrey Place, Ph.D., Procter & Gamble Rodney Nichols.

The New York Academy of Sciences

Keynote Speakers C. Everett Koop, M.D.,

Former U.S. Surgeon General Roland W. Schmitt, Ph.D., Rensselaer Polytechnic Institute

Changing Roles in R&D

Barry S. Cooperman, Ph.D., University of Pennsylvania Alexander MacLachlan, Ph.D., Du Pont Research and Development Theodore L. Brown, Ph.D., University of Illinois Charles H. Herz, National Science Foundation Louis Padulo, Ph.D., University City Science Center



DIET AND DISEASE

The Role of Lifestyle and Nutrition in Western Diseases January 15, 1993

Introduction

C. Everett Koop, M.D., Former Surgeon General

The Bower Science Lecture Denis P. Burkitt, M.D., 1992 Bower Award Laureate

Participants:

J. Michael McGinnis, M.D., U.S. Dept. of Health and Human Services John Higginson, M.D., Georgetown University Paul F. Engstrom, M.D., Fox Chase Cancer Center T. Colin Campbell, Ph.D., Cornell University Marian Burros, <u>The New York Times</u> Albert J. Stunkard, M.D., University of Pennsylvania Rena Wing, Ph.D., University of Pittsburgh School of Medicine

Marie Cassidy, Ph.D.,

George Washington University Medical Center W.P. Castelli, M.D., National Institutes of Health Jon A. Story, Ph.D., Purdue University Henry W. Blackburn, M.D., University of Minnesota

For further information contact:

Larry E. Tise, Ph.D., Executive Director The Benjamin Franklin National Memorial The Franklin Institute 20th Street at the Benjamin Franklin Parkway Philadelphia, PA 19103 215.448.1329 FAX 215.448.1364



Deutsches Krebsforschungszentrum Stiftung des öffentlichen Rechts

The Deutsche Krebsforschungszentrum (German Cancer Research Center) offers a Position as Head of the new Group for

Immunosuppression by Viruses

This group will be established in the Research Programm Applied Tumorvirology. We wish to appoint a young qualified scientist with excellent records who will be able to contribute by an innovative project to the field of immunosuppression by viruses.

The successful applicant is expected to cooperate closely with the Programm of Applied Tumorvirology as well as with other groups in the center.

The position is initially limited to 5 years with a salary in the range of approximately DM 85 000 per annum. It offers applicants the opportunity for research in a well equipped laboratory.

Applicants should submit their curriculum vitae together with a list of publications and references by January 20, 1993 to

(W0275)A

Prof. H. zur Hausen, Wissenschaftlicher Stiftungsvorstand des Deutschen Krebsiorschungszentrums, Im Neuenheimer Feld 280, D 6900 Heidelberg, Germany. Telefon 06221/42-0

FACULTY POSITION Research Oral Pathologist

Department of Oral Pathology, Biology & Diagnostic Sciences-New Jersey Dental School invites applications for full-time, tenured or tenure-track position as Research Pathologist. Primary responsibility will be to serve as focus for interactive departmental research involving basic and clinical scientists in dynamic, multidisciplinary environment. Some teaching (general, systematic and oral pathology) expected. Individuals with demonstrated success in obtaining extramural support and currently engaged in productive research preferred. Successful candidate should possess academic and scholastic credentials to qualify for joint appointment in the appropriate basic science department of adjacent New Jersey Medical School.

Academic rank and salary commensurate with experience. Applicants should send a CV, current and projected research efforts and the names of 3 references to: Dr. Richard Vogel, Chairman, Department of Oral Pathology, Biology & Diagnostic Sciences, New Jersey Dental School, 110 Bergen Street, Newark, NJ 07103-2400. UMDNJ, NJ's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/t/h/v, and a member of the University Health System of New Jersey.



NMR/MRI AND COMPUTATIONAL CHEMISTRY SCIENTISTS

Several positions are available immediately in all areas of biomedical applications of NMR spectroscopy, magnetic resonance imaging (MRI) and computational chemistry of macromolecules at the Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan. The rank will be commensurate with qualifications and ranges from POSTDOCTORAL FELLOW to RESEARCH FELLOW. We will also consider supporting established scientists in these areas for temporary visits of more than three months. The NMR Center at IBMS has a Bruker AMX600, a Bruker AMX400WB with solid state and microimaging capabilities, and a BIOSPEC 47/40 animal imaging system (expected June 1993). Excellent in-house molecular modeling and computational facilities are available. Successful candidates will be supported with adequate funding and technical support. Applicants should send curriculum vitae, list of publications, summary of research interests, a research proposal, and three letters of recommendations to: Dr. Cheng-Wen Wu, Director, Institute of Biomedical Sciences, Academia Sinica, Nankang, Taipei 11529, Taiwan, Republic of China.

MOLECULAR GENETIC/GENE THERAPY POSTDOCTORAL RESEARCH FELLOW POSITION

The Section of Medical Genetics at the School of Veterinary Medicine, University of Pennsylvania, is seeking a postdoctoral fellow to join a large program in comparative molecular genetics of inherited diseases of companion animals as models of human diseases. A canine model of phosphofructokinase deficiency causing hemolysis and myopathy is being used to characterize the molecular pathogenesis, and to develop and evaluate muscle and stem cell gene therapy. Studies include retroviral vector development, bone marrow and myoblast transplantation, and tissue specific gene expression.

retroviral vector development, bone matrow and myoblast transplantation, and risue specific gene expression. Applicants should have a doctoral degree (Ph.D., D.V.M., M.D.), and training in molecular genetics and cell biology is highly desirable. Applications should include curriculum vitae and names, address, telephone/ FAX numbers of three references, and should be directed to: Dr. Urs Giger, VHUP, 3850 Spruce Street, Philadelphia, PA 19104–6010, Telephone: 215-898-8830, FAX: 215-573-2162.

The University of Pennsylvania is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Starting in early 1993, a three-year position will be available to identify and characterize roles for growth factors in regulating proliferation and differentiation of primary muscle cells and development of intact neuromuscular junctions in three-dimensional culture. Research will be performed under control and simulated microgravity conditions in preparation for space flight experiments. Highly qualified individuals with experience in molecular and/or cellular biology of growth factors are encouraged to apply. Preference will be given to candidates who have demonstrated the ability to formulate and test novel research questions. Salary is negotiable. Research will be conducted in the rapidly growing, vibrant medical research department of a multidisciplinary children's hospital that is the major teaching affiliate of Jefferson Medical College. Applications should include a letter of interest, curric-

Applications should include a letter of interest, curriculum vitae and names of references. Please send inquiries to:

Director, Muscle Regeneration Laboratory Alfred I. duPont Institute Research, Medical Cell Biology Department P.O. Box 269 Wilmington, DE 19899

The University of Wisconsin Department of Surgery has a **POSTDOCTORAL FELLOW** position available to study the immunobiology of endocrine cell transplantation. Experience with tissue culture techniques, immunohistochemical techniques, ELISA, and some cellular immunology techniques (MLC and CML) is desirable. Knowledge of *in situ* hybridization and molecular biology skills useful. Send curriculum vitae and three letters of recommendation to: **Dr. Debra Hullett, Surgery Department, 600 Highland Avenue, Madison, WI 53792–7375.** The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

C. H. BEST INSTITUTE POSTDOCTORAL FELLOWSHIP

In Diabetes Research, Molecular Endocrinology, Molecular Biology, Differentiation, Reproductive Biology, Immunology, structure and function of membranes or Lipid Metabolism. Tenable in the Banting and Best Department of Medical Research for two years after July 1, 1993. Competitive stipend. Available to new Ph.D.'s or candidates with less than two years of postdoctoral training by June 30, 1993. Send curriculum vitae, transcripts and three letters of reference, preferably before January 15, 1993 to: Chair, Fellowship Committee, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario, Canada M5G 1L6.

POSTDOCTORAL FELLOWS CENTER FOR NEUROSCIENCE University of California, Davis (UCD)

The Center for Neuroscience at UC Davis has positions available for postdoctoral research and training in Cognitive Neuroscience. Persons holding Ph.D. or M.D. degrees who are interested in the brain bases of cognitive function are encouraged to apply. The recently established Center serves as a focus for the continuing development of the neurosciences at UC Davis. Faculty members in the cognitive neuroscience group have active research programs in various areas of cognition, including studies of attention, learning, memory, language, visual and auditory perception, hemispheric specialization and cortical function. Research in healthy persons and well defined patient populations is conducted using behavioral, electrophysiological, and metabolic and structural imaging methods. Studies are also conducted in animals including non-human primates, the latter being facilitated by the California Primate Research Center at UC Davis. Send curriculum vitae, statement of interests and the names, telephone numbers and addressess of three references to: Dr. Michael Gazzaniga, Director, Center for Neuroscience, University of California, Davis, CA 95616. UCD is an Equal Opportunity/Affirmative Action Employer.

SPORE LUNG CANCER FELLOWSHIP IN PATHOLOGY. A post-residency fellowship in Pathology funded through the NIH Specialized Program for Oncology Research Excellence (SPORE) in lung cancer is now open at the University of Colorado Health Sciences Center, Denver, Colorado. Strong interest in application of molecular biological and immunological techniques to the study of human neoplasia is essential. Interested parties please send a letter of application and curriculum vitae to: Wilbur A. Franklin, M.D., Department of Pathology, Box B216, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado is committed to Equal Employment Opportunity and Affirmative Action.

YALE UNIVERSITY POSTDOCTORAL RESEARCH IN ELECTROPHYSIOLOGY OF CLONED CALCIUM CHANNELS

Position available immediately for work on the recombinant expression, mutagenesis, and functional analysis of cloned calcium channels. Experience with electrophysiology is essential. Send full curriculum vitae, reprints of the representative publications and two references to: Dr. Tsutomu Tanabe, Department of Cellular and Molecular Physiology, Yale University School of Medicine, BCMM 254D, P.O. Box 9812, New Haven, CT 06536–0812. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION available immediately to study the role of dietary antioxidant on oxidative stress and lipid peroxidation using HPLC and GC. Doctoral degree in Biochemistry, Nutrition or Biological Science is required. Salary is \$24,000 per year plus fringe benefits for 18 months with possible extension. Send curriculum vitae and three letters of recommendation to: Dr. Mohsen Meydani, Antioxidant Research Laboratory USDA-HNRCA at Tufts Unit versity, 711 Washington Street, Boston, MA 02111. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

A POSTDOCTORAL AND A GRADUATE AS-SISTANT POSITION available on USDA-NRI Food Safety grant for two years to study *Listeria monocytogenes* pathogenicity on model tissue culture cell systems. Postdoctoral candidate must have hands-on experience in tissue culture, MAb production, immunological assays, protein purification and laboratory animal handling. Similar experience for Graduate Assistant desired. Salaries per year: to \$25,000 for Postdoctoral; \$9,000 to \$13,000 for M.S./ Ph.D. candidate. Send résumé with list of publications and names, addresses, and telephone and FAX numbers of three references to: Drs. M. G. Johnson and A. K. Bhunia, Department of Food Science, University of Arkansas, 272 Young Avenue, Fayetteville, AR 72703. Telephone: (501) 575-6405; FAX: (501) 575-6936. Closing date December 31, 1992.

POSTDOCTORAL RESEARCH POSITION Louisiana State University Medicál Center (LSUMC)

Postdoctoral research position available to work on NIHfunded project to study the mechanisms of amplification, evolution and function of the human ALU family of repeated DNA sequences (Deininger et al.–1992). Trends in Genetics 8, 307–311; Perna et al. (1992). Human Biology 64, 641–648. Experience in molecular biology or evolutionary genetics preferred.

Please send current curriculum vitae and names and addresses of three references to: Prescott Deininger, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. Telephone: (504) 568-4735, FAX: (504) 568-3370.

LSUMC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE, Brookhaven National Laboratory. The Department of Applied Science has a position available for a recent Ph.D. trained in prokaryotic molecular biology. Background in oceanography, limnology, or microbial ecology is preferred, as is experience with DNA hybridization, PCR, epifluorescence microscopy and oligonucleotide probes. The successful candidate must be able to take part in research cruises and will be involved in the development of taxon-specific growth rate measurements, and studies of the control of microbial growth in marine environments. Applicants are asked to forward résumé and names of three references to: Dr. Paul F. Kemp, Department of Applied Science, Building 318, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer, M/F/D/V.

Postdoctoral and Graduate Fellowships THE ANALYSIS OF BIOLOGICAL DIVERSIFICATION University of Arizona

A coalition of faculty members from the Departments of Ecology and Evolutionary Biology, Geosciences, and Molecular and Cellular Biology have established a Research Training Group in the Analysis of Biological Diversification, with funding from the National Science Foundation. Postdoctoral and Graduate Fellowships are available to pursue innovative research projects that integrate disparate approaches to diversification, including molecular biology, systematics, ecology, paleobiology, developmental biology and population genetics. Our goal is to encourage students with training in any of these areas to cross the boundaries of traditional disciplines, and in particular use phylogeny in understanding patterns of diversity and evolutionary processes.

these areas to cross the boundaries of traditional disciplines, and in particular use phylogeny in understanding patterns of diversity and evolutionary processes. For further information and application procedures, contact the: Diversity Program, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ 85721. Applicants for Graduate Fellowships should specify their preferred home department. Postdoctoral applications should be received by 1 February 1993 for positions available as of 1 July 1993. Fellowships are limited to U.S. citizens or permanent residents. The University of Arizona is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

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

PRESIDENT

MEDICAL COLLEGE OF OHIO PRESIDENT

The Medical College of Ohio, a free-standing health sciences college, is seeking a new President. MCO confers degrees in medicine, nursing and allied health; the graduate school offers masters in biomedical sciences, nursing and allied health disciplines and PhDs in the basic sciences.

The campus of MCO is located in suburban Toledo, Ohio, with modern, well-equipped and attractive research facilities. In addition to its own 319 acute, rehab and psychiatric beds, MCO utilizes Toledo's three finest tertiary hospitals in its teaching program. The independent Board of



Trustees seeks candidates who hold an MD and/or PhD degree, are supportive of expansion of research activities, are flexible and enthusiastic about expanding MCO's programs and services. The Search Committee encourages candidates from a wide variety of backgrounds and disciplines to apply. MCO is an affirmative action, equal opportunity employer.

Please send recommendations and resumes to: B.G. Thompson, Chairman/Presidential Search Committee, The Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699-0008.



Harvard Medical School-McLean Hospital Alcohol and Drug Abuse Research Center

Applicants are invited to apply for post-doctoral research training (National Research Service Awards) at the Alcohol and Drug Abuse Research Center on the grounds of McLean and at the Harvard Medical School.

The Alcohol and Drug Abuse Research Center is a multidisciplinary research program which includes basic, clinical and treatment research. Trainees may participate in research on the behavioral pharmacology of substance abuse; the neuroendocrine consequences of cocaine and alcohol abuse; the effects of drug abuse on the brain as assessed by brain imaging techniques (MRI, MRS, SPECT, and EEG); the evaluation of the safety and effectiveness of new pharmacotherapies for the treatment of drug abuse. The clinical research programs emphasize analysis of the antecedents and consequences of drug abuse by women. McLean Hospital is an affiliate of the Harvard Medical School and the Massachusetts General Hospital and is located in Belmont, MA, a suburb of Boston. Salary is commensurate with experience (PGY 1 to PGY 7).

Please send a curriculum vita, reprints of some recent papers, a brief statement about research interests and goals, and the names of three references (including complete addresses and telephone

numbers) to: Dr. Jack H. Mendelson, Professor of Psychiatry (Neuroscience) or Dr. Nancy K. Mello, Professor of Psychology (Neuroscience), Co-Directors, Alcohol and Drug Abuse Research Center, McLean Hospital, 115 Mill Street, Belmont, MA 02178.

McLean Hospital is an equal opportunity/ affirmative action employer.



For the Good of Mind, Body and *Spirith* THE MGH HEALTH AFFILIATES

MOLECULAR BIOLOGY

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

Technical Sales Trainees/Telemarketing

Applicants should have a BS degree in molecular biology or related field and 1 year of laboratory experience in molecular biology. No prior sales experience is required. Will be responsible for qualifying leads, and selling to selected customers over the phone. The position is based in Los Angeles.

Technical Support Representatives

Applicants should have a BS/MS degree in molecular biology or related disciplines with 2+ years of laboratory experience in molecular biology. Will be responsible for answering technical inquiries related to our product lines, assisting customers with product applications and technical writing. Should have good communication skills, proven technical writing skills and the ability to work independently.

Western Regional Sales Manager

Applicants should have a BS/MS degree in molecular biology or related fields and 2+ years of lab experience in molecular biology. 3-5 years sales experience is required (in molecular biology products). Prior sales management experience is required. Overnight traveling (50%) is necessary. Will be responsible for six sales reps in the Western/Midwest region.

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



QIAGEN INC. Fax: 818-718-2056, Phone: 800-426-8157.

BROOKHAVEN NATIONAL LABORATORY

MANAGER, OFFICE OF EDUCATIONAL PROGRAMS

Brookhaven National Laboratory is one of the nation's leading R&D facilities. The Laboratory is located on Long Island, New York and operated by Associated Universities, Inc., under contract with the U.S. Department of Energy (DOE). We presently seek candidates for the challenging position of Manager, Office of Educational Programs.

As a DOE Designated Science Education Center, our objectives are to provide educational opportunities and training in the sciences to primary, secondary and undergraduate students and to interact with teachers to maintain and improve their understanding and knowledge of technological issues. Over the course of the year, we work with approximately 700 institutions and 4000 students.

We require a minimum of an MS in a technical field (PhD in a relevant field preferred), excellent oral and written communication skills, demonstrated management experience, and a history of involvement in science education. Knowledge of DOE programs is highly desirable. Responsibilities will include managing the Program Office and working with educators to develop new programs and to provide leadership to explore new ideas for the future. Candidates must be free to travel.

The Laboratory offers a superior work environment and an excellent benefits package. If you are interested in this special opportunity please forward your CV and a description of your relevant experience, referring to position #MK8100/SCI, no later than January 31, 1993, to: Brookhaven National Laboratory, Personnel Division, Bldg. 185, Upton, NY 11973. An equal opportunity employer m/f/d/v.



BROOKHAVEN NATIONAL LABORATORY ASSOCIATED UNIVERSITIES, INC. on the frontier of science and technology

Improving Math And Science Education

NCREL develops R&D resources to support instructional improvements in elementary and secondary schools in a 7-state area. We have recently established a Midwest Consortium for the Systemic Reform of Math & Science Education (MSC) to further the professional development of teachers and administrators. Help us with this vital task.

Evaluator-Design/conduct activities for internal evaluation of the Consortium and external evaluation of associated sites/ projects. A PhD in Educational Evaluation or a related field, or an MS in evaluation with 3 years related experience required. Your professional expertise must encompass: case study and qualitative/quantitative methods; survey research; K-12 curriculum and instruction issues as related to math/science; school change processes; strong writing skills and the ability to travel 30% of the time.

Math/Science Education Specialists

Assess needs and provide on-going assistance in the design/implementation of instructional improvements in math and science education, and assist in developing professional development initiatives. A Master's degree with a Math/ Science content specialty, coupled with experience in rural/urban K-12 systems or other underrepresented and underserved populations, required. Preference will be given to candidates familiar with contemporary pedagogical theory/practice, expertise in professional/organizational development design and the ability to develop and review proposals.

Telecommunications/Database Management Technical Specialist-

Work with staff to design/implement textbased databases and on-line electronic dissemination network. A BSCS (MS preferred) and 5 years database experience on interactive electronic networks. Must demonstrate the ability to create linkages between school-based PCs and the MSC network. Knowledge of Novell, PCs, database programming and Internet and its users preferred.

Dissemination Coordinator-Gather and maintain exemplary math/science materials in a resource center while developing and expanding dissemination partnerships with various agencies. Experience with regional, state and local education agencies, as well as schools, professional organizations and institutions of higher education, required. Strong writing skills and the ability to track information requests, coordinate conferences and effectively utilize computer teleconferencing/on-line databases essential.

Program Assistant-Research support, conference participation and delivery of professional development programs are key accountabilities. A BS in Math/Science and experience in primary/secondary education required. Familiarity with cognitive approaches to math/science education preferred.

Applicants must respond by December 31,1992 to Doris Belknap, Personnel Director, NCREL, 1900 Spring Rd., Suite 300, Oak Brook, IL 60521-1480, Attention: Dept MSC. To be considered, the following is required: cover letter, detailed resume or curriculum vitae, and three references with phone numbers. An equal opportunity employer, we

actively encourage women and minorities to apply.

Push The Limits Of Pharmaceutical Success. San Francisco Bay Area

ALZA is a leading drug delivery systems company focused on the development, manufacture and marketing of proprietary pharmaceutical products. We are now looking for two experienced professionals to join our long-standing tradition of scientific and manufacturing excellence. If you thrive on working in a dynamic environment, with the best people in the business, then join ALZA and push the limits of pharmaceutical success.

Head, Biological Research

You will have responsibility for providing overall scientific lead-ership and direction in Skin Biology, Mucosai Biology, and drug/macromolecular absorp tion across a wide variety of biological interfaces and drug effects on interfaces. You will also provide direction in Protein Pharmacology, Physiology and Protein Characterization; assure research quality in relevance to product development activities; and identify new areas of research. This is your chance to become a key member of the team responsible for identifying directions for drug selection and delivery. The qualified can-didate will have a PhD in Cell Biology, Physiology, or related discipline, or an MD/PhD with extensive training or back-ground in laboratory science. In addition, you must be currently active in biological research in an academic or industrial setting. A background in developing and carrying out important, independent biology research is imperative. Excellent interpersonal and communication skills are essential to your success.

Research Scientist

If you're a Biologist/Physiologist with 3-5 years of experience in gastrointestinal physiology of absorption, this is the position for you. Experience in animal models and cell cultures is required. A solid understanding of drug absorption in the colon, cell membrane biology and transport is desirable.

To push beyond the limits of excellence, send your resume, indicating position of interest, to ALZA, Human Resources, 950 Page Mill Road, P.O. Box 58090, Palo Alto, CA 94303-0802. FAX (415) 494-5151. We are pleased to be an equal opportunity employer and encourage applications from qualified persons with disabilities.





SENIOR FACULTY POSITION: We are seeking to fill a senior faculty position at the PROFESSOR or ASSOCIATE PROFESSOR level. Candidates should have developed a vigorous research program and have a strong history of extramural research funding. Exceptional junior candidates meeting these criteria will also be considered. The area of research is open, but should complement existing research programs in the Division, which include DNA-protein interactions, molecular mechanisms of mutation induction, carcinogen-DNA interactions, mechanisms of enzyme reactions, gas-phase DNA sequencing, and rational drug design. The successful candidate is expected to interact with both graduate and undergraduate biological chemistry students and to assume a leadership role in a vigorous young Division.

The Department of Chemistry offers a supportive academic environment and a strong graduate program. Excellent opportunities exist for collaborative research with individuals in the adjacent Department of Biological Sciences, Center for Molecular Biology, and Michigan Cancer Foundation, as well as the basic science departments in the nearby School of Medicine and the College of Pharmacy. The Department of Chemistry offers an excellent research environment which includes generous research laboratory space, a departmental Central Instrument Facility with research level EPR, IR, LC-MC, GC-MS, and NMR instruments, including newly acquired 300 and 500 Mhz units. Instrumentation for stopped-flow kinetic measurements and fluorometry is also available, as well as a staffed facility for X-ray crystal structure analysis. Additional chemistry multi-user facilities include ultracentrifuges, scintillation counters, autoclaves and an automated X-ray developer. Other centers on the Wayne State campus provide automated DNA synthesis and sequencing instrumentation, protein cyrstallization and sequencing services, flow cytometry, and electron microscopy support.

Applicants should submit curriculum vitae, a list of research support, a brief statement of current and future research interests, and a list of at least three individuals willing to provide letters of reference. Respond to:

Prof. Richard L. Lintvedt, Chair Department of Chemistry Wayne State University Detroit, MI 48202.

To ensure full consideration, applications should be received by Jan. 31, 1993. Review of applications will begin before this date and will continue until a suitable candidate has been identified. *Applications from minority and women candidates are strongly encouraged. Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

VICE PROVOST FOR RESEARCH & DEAN OF THE GRADUATE SCHOOL VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

Virginia Tech invites nominations and applications for the position of Vice Provost for Research & Dean of the Graduate School. This academic officer serves as the principal advocate for research and graduate programs and reports to the Senior Vice President and Provost.

The Vice Provost has overall administrative responsibility for the Research Division and the Office of Sponsored Programs, and works with the college deans to advance the research mission of the University. The Dean of the Graduate School is responsible for the promulgation and implementation of policies governing 82 master's and 74 doctoral programs which enroll over 4,000 graduate students on campus and 2,000 students at off-campus centers in Virginia.

Virginia Tech is the senior land-grant university in the Commonwealth. Located in Blacksburg between the Allegheny and Blue Ridge Mountains and near Roanoke, the University enrolls approximately 23,000 students in nine colleges on the Blacksburg campus. Annual research expenditures exceed \$120 million.

Preference will be given to candidates who have academic credentials consistent with a senior faculty appointment, a good understanding of land-grant or research universities, an outstanding record of scholarship, demonstrated administrative skills, and a strong commitment to excellence in graduate and undergraduate instruction.

Review of letters of application with an accompanying vita will continue until the position is filled. Virginia Tech is committed to diversity among its faculty and staff and particularly encourages applications from women and minorities. Nominations are also invited. Communications should be addressed to: Dr. James Wolfe, Vice Provost for Academic Affairs, 201 Burruss Hall, Virginia Tech, Blacksburg, VA 24061-0132.

Virginia Tech is an Equal Opportunity, Affirmative Action Employer



PANLABS

SCIENTIST/SR. SCIENTIST (Position #92-90)

Opportunity for scientist with demonstrated success in Cancer Biology. Qualified individual will have a good background in biochemical, cellular, and animal pharmacological models used to evaluate chemotherapeutic agents. Candidate should have good supervisory skills and ability to work in a team environment. Ph.D. and postdoctoral experience in relevant field with 2-5 years of experience in cancer biology. Panlabs is an international company providing R&D services to the pharmaceutical industry worldwide, located north of Seattle. Submit resume/CV with 3 references to:

PANLABS, INC. Attn: Human Resources #92-90 11804 North Creek Parkway S. Bothell, WA 98011–8805

An Equal Opportunity Employer.

RESEARCH ASSOCIATE/PROJECT DIREC-TOR in the Molecular Genetics of human disease. Full-time. The project is for isolation of DNA repair gene and development of effective therapy. Two to four years of Molecular Biology and tissue culture experience desirable. Pay commensurate with experience. This position offers an Pay commensurate with experience. This position offers an unusual opportunity for independence and growth with management. Scientific contribution will be respected in publication. Send résumé and three references to: Mr. T. K. Hyatt, Oregon Health Sciences University, Medical Genetics-L103, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201–3098. Telephone: (503) 494-7191. Evad Opportunity Employer 7191. Equal Opportunity Employer.

RESEARCH ASSOCIATE for university in central Ohio. Designing, executing, coordinating and control-ling experiments. Designing and performing experimen-tal procedures using immunonucleic acid probes and detecting DNA damage and repair, using damage-specific antibodies against specific gene segments; performing ELISA, ISB and southern hybridization of target sequences separated by gel electrophoresis; studying the role of DNA damage and repair in molecular carcinogen-esis; maintaining mammalian cell lines in tissue culture; writing manuscripts, reports and abstracts for meetings and publication; performing basic lab maintenance and teaching students basic lab techniques and maintenance; teaching students basic tab techniques and maintenance; developing new methodology for detection of DNA damage *in vivo* in human cells; applying immunoassay methods to localize gene specific damage and repair of this damage in single cells; using computers to analyze the immunoassay results. Supervising and training labo-ratory entry-level positions. No experience required in above during hubble unit and the single suit of the set of above duties but applicants will qualify with M.S. in biological health science and at least two years of expe-rience working in a biomedical research lab with bacterial and yeast cultures; working with human cell cultures; working directly with the Ames Test; using microman-ipulation techniques, centrifuges, ultracentrifuges, spectrophotometers, photofluorometers, scintillation count-ers and microscopes; DNA isolation, labeling and South-ern Blotting and staining techniques. Forty hours per week, 8:00 am to 5:00 pm, Monday through Friday, \$21,562 per year. Must have proof of legal authority to work permanently in the United States. Send résumés in duplicate (no calls) to: C. Bussard, JO#1333225, Ohio Bureau of Employment Services, PO Box 1618, Columbus, OH 43216.

RESEARCH ASSOCIATE POSITION available to direct a project involving the transfer of genes to chicken embryos and functions of myosin-associated muscle proteins. Requires 3 years of postdoctoral expe-rience in molecular biology, protein chemistry, develop-mental biology and microinjections. Salary commensureferences to: Donald A. Fischman, M.D., Department of Cell Biology/Anatomy, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Equal Opportunity Employer. M/F/H/V.

RESEARCH ASSOCIATE to manage Transgenic Facility. The Departments of Biological Sciences and Pediatrics, University of Pittsburgh and Children's Hospital of Pittsburgh are currently seeking a Ph.D. to direct the operation of a transgenic facility already under devel-opment. Experience in Stem Cell Technology is preferred but not required. Salary competitive with industry and commensurate with experience. This non-tenure-stream position is available July 1, 1993. In order to ensure full consideration, applications must be received by March 31, 1993. Contact: Dr. Terry Van Dyke, Department of Biological Sciences, 278 Crawford Hall, Pitts-burgh, PA 15260. Telephone: (412) 624-6987, FAX: (412) 624-4759. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE. Minimum of M.D. or **RESEARCH ASSOCIATE.** Minimum of M.D. or Ph.D. (Biology or Medicine) plus two years of experi-ence conducting cancer research involving molecular, cell biology and immunology. Experience in antibody immu-nization, purification of antibodies, immunofluores-cence, FPLC purification, monochrome antibody tissue section, protein function analysis, cell growth regulation, ELISA, radioimmunoassay, WESTERN, NORTH-ERN, and SOUTHERN protein blotting techniques. Job site/interview: San Diego, California. Salary: \$28,775 per year. Send this ad and your résumé to: Job #JJ-23684, P.O. Box 269065, Sacramento, CA 95826–9065, no later than December 28, 1992.

POSITIONS OPEN

STAFF RESEARCH ASSOCIATE to conduct research in molecular biology of parasitic protozoa. Devel-op cultivation procedures and maintain parasite cultures. Perform karyotype and schizodeme analysis of parasites. Apply recombinant DNA and PCR technology to design and to test specific probes for detection and identification of pathogenic protozoa. Requires: Ph.D. or equivalent in Biology; at least two years in the job offered or two years of research experience in molecular biology of kinetoplas-tids; scientific publications in this field. Demonstrated ability to design and perform research projects involving cloning and sequence analysis of nucleic acids. Practical knowledge of culturing parasitic protozoa. Experience in computer analysis of genetic sequences. Salary \$31,200 per year. Job location/interview: Los Angeles, California. Please send this ad and résumé to: Job# WS12897, P.O. Box 9560, Sacramento, CA 95823–0560, no later than December 28, 1992.

RESEARCH ASSOCIATES IN VIVO PHARMACOLOGY

Acea Pharmaceuticals, Inc., a start-up neurobiotech-nology company located in Irvine, California, seeks research associates for its In vivo Pharmacology Group. These positions involve in vivo research and require knowledge of surgical and catheterization techniques, skills and experience with statistical analysis is preferred. Send a cover letter and résumé including the names and addresses of references to:

Dr. P. Marek Acea Pharmaceuticals, Inc. 1003 Health Sciences Road West Irvine, CA 92715

RESEARCH ASSOCIATE/POSTDOCTORAL POSITION. The Division of Endocrinology, Department of Pediatrics, University of Pittsburgh has an open-ing for a Ph.D. Molecular Biologist to participate as a Research Associate/Postdoctoral trainee in research relating to the molecular mechanisms involved in the regulation of growth factors/receptors in growth and develop-ment. Fully operational and equipped laboratory currently staffed by M.D., Ph.D. and technical support with enstaffed by M.D., Ph.D. and technical support with en-dowed and NIH funding. The successful candidate would be eligible for faculty appointment. Salary and benefits are competitive. This position is available July 1, 1993. In order to ensure full consideration, applications must be received by March 31, 1993. Contact: Dr. Mark A. Sperling, Chairman, Department of Pediatrics, Chil-dren's Hospital of Pittsburgh, 3705 Fifth Avenue, Pittsburgh, PA 15213. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

There is an immediate opening for a Ph.D.-level **REPRODUCTION BIOLOGIST** to develop independent and extramurally fundable research in either reproductive immunology, reproductive genetics, preim-plantation genetics, or ovarian physiology. *RPSLMC is* an Equal Opportunity Employer. Send curriculum vitae and three letters of reference to: **Richard G. Rawlins**, Ph.D., Director IVF/ART Laboratories, Department of Ob/Gyn, Rush-Presbyterian-St. Luke's Medical Center, 1653 West Congress Parkway, Chicago, IL 60612, FAX: (312) 942-4043.

EVOLUTIONARY BIOLOGIST

The Department of Biology, University of California, Los Angeles, is expanding its interdisciplinary program in evolutionary biology. We seek an outstanding evolu-tionist with a strong interest in organismic biology. Candidates for this tenured or tenure-track position should have a rigorous research program using modern approaches to problems in evolutionary biology, and are expected to participate in teaching and graduate training programs in evolution. The specific area of specialization and level of appointment are open. The position will be available July 1, 1993.

Applicants should submit curriculum vitae, description of research interests, and names and addresses of three references to: Dr. Blaire Van Valkenburgh, Evolutionary Biologist Search Committee, Department of Bi-ology, University of California, Los Angeles, CA 90024–1606. The deadline for receipt of applications is February 1, 1993. UCLA is an Affirmative Action/Equal Opportunity

Employer.

POSITIONS OPEN

TOXICOLOGISTS

RESEARCH ASSOCIATES and POSTDOC-TORAL POSITIONS are available in the area of general toxicology. The candidate must have experience general toxicology. The candidate must have experience in animal testing of drugs, preferably industrial experi-ence. The salary is highly competitive and depends on previous experience in toxicology. Please send your résumé to: Dr. H. Salari, The Jack Bell Research Centre, University of British Columbia, 2660 Oak Street, Vancouver, B.C. V6H 3Z6, Canada.

RESEARCH SCIENTIST

Research Scientist position available in **Immunology** to join a group studying the basis of immunity and molecular pathogenesis of *Yersinia pestis*, the causative agent of plague. The program is focused on the nature and characterization of protective immunity to plague and on new vaccine development. Experience in immu-nochemistry and molecular immunology, or cellular immunology is required. Interested applicants should send curriculum vitae, reprints of representative publications, and names of three references to:

Dr. Arthur M. Friedlander, Chief, Bacteriology Division, U.S. Army Medical Research Institute of Infectious Diseases Fort Detrick, Frederick, MD 21702–5011 Telephone: (301) 619-7341. FAX: (301) 619-2893

BIOLOGY POSITION

Animal cell biologist/cell physiologist, vertebrate or invertebrate, to teach upper division courses in an area of specialty for majors, lower division courses in cell biology, and develop and teach courses for non-majors as a part of an important program of general studies. Candi-dates who use techniques of modern molecular biology and/or immunology to investigate basic problems in cell biology/cell physiology will be given special consider-ation. The department maintains an active research program that involves undergraduate students. As a part of that program, the candidate will be expected both to seek personal grants and to contribute to collaborative departmental site grants. Ph.D. required: rank commensurate with training and experience. Members of groups tradition-ally underrepresented in the sciences are especially encouraged

Pepperdine University is a Carnegie level I, "national" 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 ideals of the Christian faith." Pepper-dine University is an Equal Opportunity Employer and actively encourages women and minority applications. Applications will be reviewed until a suitable candidate

is found, but should be received by February 1, 1993 to ensure consideration.

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

SENIOR RESEARCH CHEMIST: Design and implement development of *in vivo* rodent models of gastrointestinal transport including intraduodenal infusions, portal vein/mesenteric vein cannulation and bile duct cannulation. Pharmacokinetic studies in dogs. Consult re absorption, distribution and metabolism of nutrients, particularly lipid vehicles. Evaluate concentration of drugs in biological samples by radioisotope techniques and HPLC. Studies include bioavailability, mechanism of absorption, regulatory status of excipients and physi-cal/chemical stability of drug candidates in dosage forms. Requirements: Ph.D. in nutrition and three years of record of experimentation in areas of G.I. absorption process and metabolism utilizing nutrition and toxicological background and techniques as applied to excipilogical background and techniques as applied to excipi-ents. Skill in vascular surgery in small animals and experience with HPLC assay development and radioiso-tope techniques. Outstanding publication and presenta-tion background and excellent scholastic record. Forty hours per week; \$4676.00 per month, résumé or curric-ulum vitae to: Philadelphia Job Bank, 444 North 3rd Street, 3rd Floor, Philadelphia, PA 19123, JO# 4488474.

Associate **Scientist**

Genentech, Inc., an internationally recognized leader in the field of biotechnology, has an opportunity available for an Associate Scientist with a PhD in Biochemistry or Bacterial Physiology and experience in protein folding. You will study and improve the secretion and folding of mammalian protein therapeutics by E. Coli using such techniques as in vitro protein folding, in vitro protein expression and E. Coli host modification.

Our extensive benefits package includes fully paid dental/ medical/vision coverage for you and your dependents, child care facilities, free health club membership and an employee stock purchase plan. Send your resume indicating Dept. #SWJS to: Genentech, Inc., Human Resources, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.

Genentech, Inc.

DNX Corporation, the established leader in the emerging field of transgenic sciences, has a unique career opportunity for a Research Associate in our Princeton, New Jersey research facility.

BIOTECHNOLOGY **Research Associate**

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> Director, Human Resources DNX Corporation 303B College Road East Princeton, NJ 08540

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

Their mailing address is: U.S. Army Institute of Dental Research Walter Reed Army Medical Center Washington, D.C. 20307-5300

FOR APPLICATION MATERIALS, WRITE TO:

Associateship Programs (GR 430/SDR)



NATIONAL RESEARCH COUNCIL NAS 2101 Constitution Avenue, NW NAE Washington, D.C. 20418 IOM FAX: (202) 334-2759

Applications must be submitted directly to the NRC by January 15 or April 15.

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ANAEROBIC MICROBIOLOGIST. The Naval Dental Research Institute, Great Lakes, Illinois has a position available for a doctoral level microbiologist. The position involves basic and applied research on the microbiota of oral diseases. The successful candidate will possess experience in anaerobic microbiology, immunoassay and monoclonal antibody development. Prior experience with spirochetes is highly desirable. Salary is commensurate with experience (\$32,423 to \$50,516). U.S. Citizenship required. For information on application procedures/forms, telephone: (708) 688-2222 Consolidated Civilian Personnel Office, Building 1-H, NTC, Great Lakes, IL 60088-5259. This job opportunity closes when position is filled.

VISION SCIENTIST NEUROANATOMY/NEUROPHYSIOLOGY

The University of Missouri-St. Louis School of Optometry seeks a vision scientist to teach professional and graduate level neuroanatomy/neurophysiology, and possibly human anatomy/physiology, ocular anatomy/physiology. Active research and external support expected. Rank/salary/appointment date negotiable. Letter, résumé, names of three references by February 1, 1993 to: Dr. Jerry L. Christensen, Dean, School of Optometry, University of Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121. The University of Missouri is an Equal Opportunity/Affirmative Action Employer, and complies with the Americans with Disabilities Act of 1990.

GEOGRAPHIC INFORMATION SYSTEM MODELER

Participate in research on the effect of climate change and enhanced CO_2 concentrations on forests through spatial analysis and modeling. Position requires: (1) an M.S./M.A. in computer science, geography, ecology, forestry (or related field) or equivalent degree and experience; (2) demonstrated leadership developing software in a team environment; (3) demonstrated experience with the following in a UNIX environment: GIS software (ERDAS, SPANS, PCI or GRASS), image processing and data display software (e.g. IPW, PV-WAVE, TecPlot), database management software (e.g. dBASE, Paradox); and (4) programming in C and Fortran. Please do not respond until you write or call for a complete position description which lists preferred qualifications and application procedures. Application packages must be received by December 31, 1992. Human Resources, ManTech Environmental, 1600 SW Western Boulevard, Corvallis, OR 97333. Telephone: (503) 754-4666. Equal Opportunity Employer.

MOLECULAR BIOLOGIST

Neuroscience laboratory seeks molecular biologist for projects involving isolation and characterization of novel neurotransmitters and their receptors. Background/experience in molecular/cell biology (U.S. citizens and permanent residents desired). Please send curriculum vitae to: Donald J. Reis, M.D., Division of Neurobiology, Cornell University Medical Center, 411 East 69th Street—KB410, New York, NY 10021. Equal Opportunity/Affirmative Action Employer/M/F/H/V.

SENIOR RESEARCHER/NUTRITION AND HEALTH SPECIALIST. Salary: \$59,000 per year. Work schedule: 8:00 a.m. to 5:00 p.m. Senior researcher in analysis and evaluation of socioeconomic policies and interventions of health, food consumption and nutritional risk. Ability to lead teams of international experts in the field to gather data, discuss issues with government entities and U.S. government and international donors. Design of nutrition and food strategies for donor agencies. Design supplemental food programs and evaluate effectiveness of selected programs on groups of beneficiaries. Ability to determine distributional consequences of selected programs on various poor in various countries. Must be fluent in Spanish and have experience in working with the public sector (government) in developing countries. Must have training in international nutrition along with Master's degree in Public Health/ Nutrition and five years of job-related experience. All applicants must send résumé including Social Security Number, and must include Job Order Number NC 3021002 and DOT Code 096.121-014. Interested persons should apply to nearest Job Service office or by submitting a résumé to: Job Service, 516 N. Mangum Street, Durham, NC 27701.

POSITIONS OPEN

IMMUNOLOGIST

The Division of Pathobiology and Immunobiology of the Yerkes Regional Primate Research Center, and the Department of Microbiology and Immunology, School of Medicine, Emory University have an opening for an immunologist with experience in retrovirus research. Candidates should have a Ph.D., D.V.M., M.D., or equivalent and should have sufficient research experience to demonstrate the ability to establish an independent research program in areas related to the pathogenesis of AIDS and related retroviruses in nonhuman primate models. The successful applicant will also participate in ongoing clinical, virological, and pathological studies with human or simian immunodeficiency viruses. The primary appointment will be at the Yerkes Primate Center, with a secondary, research-track appointment in the Department of Microbiology and Immunology. Salary is negotiable and commensurate with experience. The position is available immediately. Letters of application including curriculum vitae, a brief statement of research interests, and the names of three references, should be forwarded to: Dr. Harold McClure, Associate Director, Yerkes Primate Research Center, Emory University, Atlanta, GA 30322. Applications should be submitted by January 1, 1993. Emory University is an Equal Opportunity/Affirmative Action Employer.

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

Patent and Trademark Office Office of Personnel Box 171 Washington, DC 20231 ATTN: D. Dowell (180)

For further information, call David L. Lacey at (703) 308-4314. U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.

BIOLOGISTS

Northeast Missouri State University (NMSU) offers two tenure-track positions, one each in PHYSIOLOGY and DEVELOPMENTAL BIOLOGY. For details, see *Science* (30 Oct 1992, p. 853), or call: Dr. Mike Tannenbaum⁷ (816-785-4597), Science Division, NMSU, Kirksville, MO 63501. Applications accepted until positions filled.

ANNOUNCEMENTS

EARTH SYSTEMS SCIENCE FELLOWSHIPS UNIVERSITY OF NEW HAMPSHIRE

The Institute for the Study of Earth, Oceans and Space at the University of New Hampshire is seeking applicants for graduate fellowships in the broad area of Earth Systems Science, with an emphasis on regional to global biogeochemistry. Successful candidates will have a strong undergraduate

Successful candidates will have a strong undergraduate record in the natural sciences, a desire to apply their skills to the understanding of current environmental problems at the regional to global scale, and the ability to work as part of an integrated, interdisciplinary team. Individual projects are available in such areas as trace gas fluxes between ecosystems and the atmosphere, global changes in land use, effects of atmospheric deposition on terrestrial ecosystems, and modeling of global hydrologic and carbon fluxes.

Fellowships are funded under an interdisciplinary science grant from the National Aeronautics and Space Administration's Program: Mission to Planet Earth/The Earth Observing System.

Applicants should send a letter of interest with a current transcript, curriculum vitae and two letters of recommendation to:

Professor John Aber Complex Systems Research Center Institute for the Study of Earth, Oceans, and Space Morse Hall University of New Hampshire Durham, NH 03824

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