

High Throughput ICP Spectrometer

The Super Sequential is an inductively coupled plasma (ICP)/Echelle spectrometer for laboratories requiring both high throughput and analytical versatility. The instrument combines the optimal features of both the simultaneous and sequential ICP designs to facilitate sample throughput and to reduce costs for elemental analysis laboratories. The Super Sequential increases sample throughput by taking advantage of the time in the analytical cycle not used for actual measurement. A large proportion of the analytical cycle is used for steps occurring before and after taking data, including sample uptake, equilibration, and rinsing. The Super Sequential takes advantage of this dead time to increase operational efficiency. Leeman Labs. Circle 89.

Desiccator Cabinet

The AutoDry Desiccator Cabinet is for storage of chromatography plates, electronic parts, and photo plates. The cabinet features a self-activated drying device that automatically dehumidifies up to 40% humidity and regenerates every 5 1/2 hours. The automatic desiccant is made of silicon dioxide and dries the interior of the cabinet for 5 hours. Then the door on the outside opens, the heater surrounding the desiccant is activated, and the moisture is driven off. The dehumidifying cycle then repeats. The cabinet is constructed of epoxy-coated steel with a tempered glass window. It includes two removable shelves, a bottom-hinged door, and a light. Labconco. Circle 90.

Peptide Synthesizer

The 9050 Plus Peptide Synthesizer provides researchers with flexibility, speed, and scalability in peptide synthesis. The instrument allows the user to select from several Fmoc (fluorenylmethyloxycarbonyl) protecting group chemistries to select the ones most efficient for individual peptide synthesis. A dual syringe activation feature permits users to separate activators, delivering each only as needed in the synthesis process. The instrument performs synthesis cycles as fast as 16 min, so a researcher can manufacture a 15 amino acid peptide in a single day. The user can make peptide quantities from 0.05 to 5 mmol. Millipore. Circle 91.

Tissue Slicer

A digital display oscillating tissue slicer contains up-to-date features—slice thickness set on thumb wheel, push button advance, and linear cutting blade motion to 3000 cycles per minute. The motorized variable-speed specimen advance has momentary and continuous modes. A pure white, high-intensity halogen lamp with Dichroic reflector directs heat away from the specimen. Electron Microscopy Sciences. Circle 92.

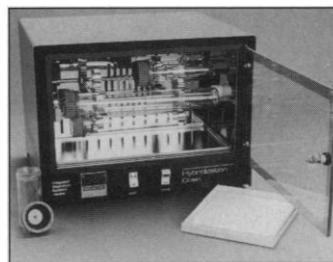
Multiple Fiber Bioreactor

A Multiple Fiber Bioreactor (MFB) designed as a cell culture system for efficient production of monoclonal antibodies and other mammalian cell products has been introduced. The Applikon MFB features large extra capillary volume, a long-life cartridge, and direct aeration to avoid anoxic pockets. The MFB is capable of producing up to 58.6 mg per day of

monoclonal antibodies, a rate of production 20 times higher than can be obtained with a stirrer flask. Unlike other cartridge systems, the patented Applikon MFB contains three bundles of fibers; one is for rapid nutrient transfer and the other two are for aeration. All bundles can be operated independently. Applikon. Circle 93.

Hybridization Oven

The ISS Hybridization Oven is designed for researchers doing nucleic acid hybridizations on Southern (DNA) and Northern (RNA) blots and protein immunovisualization on protein immunoblots. The oven will run up to four 35 by 300 mm or eight 35



by 150 mm hybridization bottles simultaneously. The unit features a small footprint, simple digital controller, and a stackable design that allows for two ovens to be run simultaneously at different temperatures. Integrated Separation Systems. Circle 94.

Polymer Detector

The miniDAWN is a low-cost light-scattering instrument for absolute polymer characterization. The three-angle light-scattering detector determines the absolute molecular weights and sizes of polymers directly, without resorting to column calibration or reference standards. It can be coupled to any liquid chro-

matograph, and, unlike mass spectrometry, it indicates what molecules are doing in solution. In biotechnology applications, the miniDAWN can reveal aggregation phenomena that are not usually detected by ultraviolet or nuclear magnetic resonance instruments. Wyatt Technology Corp. Circle 95.

Literature

Capillary Gel Electrophoresis of PCR Products: Easy Sample Preparation Method is an application note that covers a simple dialysis technique to increase sensitivity and reproducibility in polymerase chain reaction (PCR) product analysis. J & W Scientific. Circle 96.

The Computational Chemistry Yellow Pages is a comprehensive guide to software, suppliers, and information resources for molecular modeling and computer-aided molecular design. Molecular Solutions, Inc. Circle 97.

Scientific Software Review (Fall/Winter 1992) lists more than 300 products in such fields as molecular biology, biochemistry, chemistry, pharmacokinetics, molecular modeling, cell biology, and environmental monitoring. es²c. Circle 98.

ImmunoMethods is a new journal providing detailed and authoritative reports on immunological methods and their applications. Each issue will concentrate on a specific topic and be assembled by an expert editor. Projected topics include tolerance, immunological methods to develop receptor-specific probes and ligands, x-ray crystallography of antibodies and antibody-antigen complexes, autoimmunity concepts and experimental methods, bacterial immunoglobulin binding proteins, and cytokines. Academic Press Journals. Circle 99.

Sample Handling in Gas Chromatography describes a range of methods and automatic samplers for extracting analytes directly into the gas phase either at ambient or elevated temperatures. Perkin-Elmer. 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

ASSISTANT PROFESSOR—BIOLOGY

Tenure-track Assistant Professorship available September 1, 1993. Individuals with demonstrated ability and sincere interest in teaching undergraduate microbiology, as well as general biology to majors and non-majors, are encouraged to apply. Completion of the Ph.D. prior to September, 1993 is expected. Salary: Competitive. Starting Date: September 1, 1993. Application Deadline: Review of applications will begin as received and continue until the position is filled. Apply to: Send letter of application, résumé and the names and telephone numbers of at least three references to:

Biology Department Search Committee
Potsdam College
Potsdam, NY 13676

State University of New York is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR AND CELL BIOLOGY UNIVERSITY OF CALIFORNIA, BERKELEY

The Department of Molecular and Cell Biology invites applications for a **tenure-track ASSISTANT PROFESSOR** position, with appointment beginning July 1, 1993. Candidates should have demonstrated excellence, originality, and productivity in research in **structural biology** and should have a strong interest in undergraduate and graduate teaching. Preference will be given to candidates carrying out NMR or computational studies of macromolecules, macromolecular interactions and/or protein folding. **Applications** should include a cover letter, detailed curriculum vitae, an up-to-date list of all publications and one copy of each of three of the most significant papers, a brief statement (1 to 2 pages maximum) of research objectives and teaching interests, and three letters of evaluation (to be sent directly from three individuals who are most familiar with the candidate's accomplishments and potential). The closing date for acceptance of applications is **January 18, 1993**. Send applications to: **Structural Biology Search Committee, MCB Department, 401 Barker Hall, University of California, Berkeley, CA 94720**. **EARLY APPLICATIONS ARE ENCOURAGED.** *The University of California is an Affirmative Action/Equal Opportunity Employer. Women and members of underrepresented minorities are especially encouraged to apply.*

TWO TENURE-TRACK ASSISTANT PROFESSOR POSITIONS IN DEVELOPMENTAL NEUROSCIENCE

Department of Anatomy
University of Utah School of Medicine

Applicants must have a Ph.D., M.D., or equivalent degree, postdoctoral research experience, and the ability to develop a strong independent research program. Applicants with demonstrated research expertise in any aspect of nervous system development will be considered. A strong commitment to teaching medical and graduate students is also required; prior teaching experience in a medical school basic science curriculum is preferred. These positions will not require teaching of human (gross) anatomy. Applicants should send curriculum vitae (including a bibliography and list of grant support), a statement of research interests, and the names and addresses of three references.

Send applications to: **T. N. Parks, Chair, Department of Anatomy, University of Utah School of Medicine, Salt Lake City, UT 84132**. Deadline for applications and nominations is February 1, 1993 or until suitable candidates are identified. *The University of Utah is an Affirmative Action/Equal Opportunity Employer.*

The Life Science Department of New Mexico Highlands University invites applications for three tenure-track positions in biology at the **ASSISTANT PROFESSOR** level in the areas of animal physiology–health science; microbiology; and electron microscopy–genetics, effective August 16, 1993. Responsibilities include participation in the undergraduate and graduate life science curricula, including subject area–related courses in biology and environmental science programs. Research and supervision of M.S. students expected. Closing date January 12, 1993 or until filled. Submit letter of application indicating which position you are applying for, résumé, official transcripts and a list of three references with telephone numbers to: **Biology Search Committee, School of Science & Engineering, New Mexico Highlands University, Las Vegas, NM 87701**. *New Mexico Highlands University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR of Chemistry, Rice University. (Tenure-track.) Imaginative and energetic candidates are sought in any area of "physical" chemistry. Innovative research programs in fields which complement those of the department are desired, with emphasis on areas which transcend traditional boundaries. Candidates should send letters of recommendation, a résumé, and a description of their proposed research program to: **Professor Philip R. Brooks, Faculty Search Committee, Chemistry Department, Rice University, P.O. Box 1892, Houston, TX 77251–1892**. *Rice University is an Equal Opportunity/Affirmative Action Employer.*

PLANT BIOLOGIST: Molecular Systematics or Molecular Developmental Biology. Western Carolina University (WCU) invites applications for an **ASSISTANT PROFESSOR** tenure-track position in Biology. Applicants must have a commitment to teaching excellence and be willing to teach introductory biology, botany, and specialty courses at undergraduate and Master's levels. They should be able to develop externally funded research and promote student involvement. Ph.D. required. Send résumé, three letters of reference, transcripts, a statement of teaching philosophy, and research goals by January 20, 1993, to: **Dan Pittillo, Department of Biology, Western Carolina University, Cullowhee, NC 28723**. *WCU is an Equal Opportunity/Affirmative Action Employer.*

BIOLOGIST. Wabash College, a private liberal arts college for men, invites applications for a Byron K. Trippet **ASSISTANT PROFESSORSHIP** to begin July 1, 1993. Ph.D. required. This position is tenure-track in accordance with College guidelines and review procedures, and carries with it a summer stipend and research support funds for the first two years of the appointment. Responsibilities include teaching developmental biology, comparative vertebrate anatomy and embryology, participating in a team-taught introductory course and directing undergraduate research projects. Excellent facilities for research are available. Wabash College is committed to a diverse faculty and excellence in teaching. *We are eager to receive applications from a broad spectrum of individuals and especially from women and members of minorities.* Applicants should submit curriculum vitae, three letters of recommendation and a statement of teaching and research interests to: **Austin Brooks, Department of Biology, Wabash College, Crawfordsville, IN 47933** by January 15, 1993. *Equal Opportunity Employer.*

MOLECULAR BIOLOGIST: ASSISTANT PROFESSOR

The Department of Biological Sciences at Wright State University invites applications for a tenure-track Assistant Professor position in molecular biology. Applicants must have a Ph.D. and postdoctoral experience in the application of modern recombinant DNA methods to the study of significant problems in either microbial or eukaryotic genetics. Teaching duties will include an undergraduate molecular-oriented genetics course. The successful candidate will be expected to develop a fundable research program in molecular genetics and to participate in the departmental M.S. degree program and the interdisciplinary Biomedical Sciences Ph.D. program. Applicants should send curriculum vitae, statements of teaching philosophy and research goals, and the names and addresses of at least three referees to: **Molecular Biologist Search Committee, Department of Biological Sciences, Wright State University, Dayton, OH 45435**. We will begin reviewing applications on 1 January 1993. *Wright State University is an Equal Opportunity/Affirmative Action Employer. We encourage women and minorities to apply.*

ASSISTANT PROFESSOR

The Department of Biology invites applications for a tenure-track position in molecular biology/plant development beginning Fall 1993. A Ph.D. is required. The candidate is expected to teach in the areas of cellular and molecular biology, plant development and/or related areas of competence, and establish an independent research program involving undergraduate and M.S.-level students. Submit résumé and 3 letters of reference by January 31, 1993 to: **Dr. Klaus Bräsch, Chair, Department of Biology, California State University, 5500 University Parkway, San Bernardino, CA 92407**. **FAX: 909-880-7005**. *An Equal Opportunity/Affirmative Action/Section 504, Title IX Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at the State University of New York at Geneseo seeks applicants for a tenure-track assistant professor position in **Animal Physiology** with a specialization in, e.g., neurophysiology or endocrinology.

Successful candidates will be expected to:

- 1) teach a comparative animal physiology course, lecture and laboratory,
- 2) develop an active research program involving undergraduate and graduate students,
- 3) advise students and participate in general departmental administration.

The department has responsibility for nearly 600 majors in Biology, Biochemistry, and Medical Technology.

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

All applicants must have a Doctor of Philosophy degree in biology or related field and postdoctoral experience. Applications including curriculum vitae, publications, graduate transcripts, and three letters of recommendation should be sent by **18 January 1993** to: **Dr. Edwin J. Spicka, Biology Department, 1 College Circle, SUNY-Geneseo, Geneseo, NY 14454. FAX: (716) 245-5007.** The State University of New York is an Affirmative Action/Equal Opportunity Employer. Minorities and women are strongly urged to apply.

ASSISTANT PROFESSOR. The Center for Pharmaceutical Biotechnology invites applications for assistant professor in either protein/genetic engineering or in pharmaceutical biotechnology product formulation with application to pharmaceutical design or development, available September, 1993. Ph.D. and postdoctoral experience required. Responsibilities include developing a strong, externally funded research program, and teaching in the graduate and professional programs. The Center for Pharmaceutical Biotechnology environment fosters collaboration and cooperation, bringing together campus researchers from the full range of biotechnology-related disciplines. In addition to appointment within the Center, the successful candidate will have a tenure-track appointment within a College of Pharmacy basic science department. For full consideration, curriculum vitae, description of research interests, and three letters of reference should be forwarded by **29 January 1993** to: **Dr. Michael E. Johnson, Interim Director, Center for Pharmaceutical Biotechnology (m/c 874), University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680-6998.** The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

VERTEBRATE FIELD ECOLOGIST, ASSISTANT PROFESSOR. Tenure-track position begins August 22, 1993. Mammalogist or herpetologist preferred. Teach comparative anatomy, general zoology, science and technology in society, ecology, and general biology for non-majors. Doctoral degree and teaching experience in biological sciences required. Send letter of application, curriculum vitae, all graduate/undergraduate transcripts, and three letters of recommendation by **January 15, 1993**, to: **Lance Urven, Biology Department, University of Wisconsin-Whitewater, Whitewater, WI 53190.** Names of applicants may be made public unless applicant makes written request otherwise. *UW-W is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR EASTERN VIRGINIA MEDICAL SCHOOL

The Department of Radiation Oncology & Biophysics invites applications for a tenure-track faculty position from individuals with research interests in the general area of tumor biology. We are seeking an individual to extend an existing program relevant to human tumor markers. Applicants should have a Ph.D. or equivalent degree. Applicant should send curriculum vitae, description of research interests, and names of three references to: **James Shaeffer, Ph.D., Department of Radiation Oncology & Biophysics, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PLANT BIOLOGIST: Saint Joseph's University, a four-year liberal arts Jesuit University invites applications for a tenure-track **ASSISTANT PROFESSOR** position beginning August 1993. Ph.D. Required. The successful candidate will teach a majors course in plant biology. Preference will be given to candidates with expertise in light and electron microscopy, and an interest in field work. A research program involving undergraduates is expected. Please send curriculum vitae, unofficial copies of all transcripts, statement on teaching and research interests, equipment needs, names and telephone numbers of three references to: **Dr. James Watrous, Chairman, Biology Department, Saint Joseph's University, 5600 City Avenue, Philadelphia, PA 19131.** Review of applications will begin early January, 1993. *Equal Opportunity/Affirmative Action Employer.*

Two tenure-track **ASSISTANT PROFESSORS** to begin Fall 1993. (1) **ENVIRONMENTAL STUDIES/ECONOMICS.** Specialist in environmental economics for joint position in Economics and Environmental Science Departments. Candidate must have a broad interest in economics and a background in a natural science. (2) **ENVIRONMENTAL STUDIES/COMPARATIVE POLITICS.** Political Scientist with environmental interests for joint position in Political Science and Environmental Science Departments. We seek a comparativist (specialty other than Latin America or Mid-East) to teach area-related courses in Political Science and courses in Environmental Science. ES-related courses for both positions include environmental, political, economic, and social aspects of sustainability, as well as courses for a new interdisciplinary major in Environmental Sustainability. We desire an excellent teacher strongly committed to undergraduate teaching; Ph.D. preferred. Send letter of interest, three letters of recommendation, and curriculum vitae to: **Allegheny College, Meadville, PA, 16335; (position 1 to Economics/ES Search Committee, Box 140; position 2 to Political Science/ES Search Committee, Box 55).** Application deadline is **January 20, 1993.** *Equal Opportunity Employer; women and minorities encouraged to apply.*

ENVIRONMENTAL AND AGRICHEMICAL EDUCATION SPECIALIST, Washington State University, Tri-Cities Campus, Richland, Washington. A 12-month, tenure-track, **ASSISTANT PROFESSOR** rank position in the Department of Entomology, College of Agriculture and Home Economics, which will serve as the education specialist on issues of environmental quality and agrichemicals for Washington State University. For further information contact: **Barbara A. Scott, 509-335-2888.** *Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer.*

GENETICS/MICROBIOLOGY—ASSISTANT PROFESSOR, Fall 1993, renewable. Ph.D. required. Teaching emphasis with hands-on laboratory work. Write for job description before February 19, 1993: **Dr. Frank A. James, Dean, LaGrange College, LaGrange, GA 30240.** *Equal Opportunity Employer.*

FACULTY POSITIONS

Department of Biological Chemistry Penn State University College of Medicine

Applications are invited for two tenure-track positions to begin on or after June 1, 1993. We seek individuals who have demonstrated excellence in physical, cell, molecular or developmental biochemistry. Preference will be given to applicants at the **ASSISTANT PROFESSOR** level although outstanding individuals at the **ASSOCIATE PROFESSOR** level will be considered. Applicants must hold a Ph.D. and/or M.D. degree and have had postdoctoral research experience. Successful applicants are expected to establish an independent, extramurally funded research program and to participate in the education of graduate and medical students. Applicants should send curriculum vitae, a synopsis of research plans, and the names and addresses of three individuals who will provide letters of reference to: **Chair, Search Committee, Department of Biological Chemistry, Box 850S, Penn State University, Hershey, PA 17033.** Applications should be submitted by **January 31, 1993.**

An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

Grinnell College invites applicants for a tenure-track faculty position as an **ASSISTANT PROFESSOR** (Associate Professor possible) of Biology to begin in August 1993. We seek a biologist well acquainted with modern techniques of molecular biology to teach at all levels of our curriculum. Teaching duties include upper-level and intermediate-level courses in molecular biology, and participation in the general education program of the College. We seek candidates who will conduct an active research program involving undergraduates. A Ph.D. is required and postdoctoral experience is preferred. Start-up funds, support for student-faculty research and excellent facilities are available. Send curriculum vitae, three letters of recommendation and all transcripts to: **Charles H. Sullivan, Molecular Biology Search Committee, Department of Biology, Grinnell College, Grinnell, IA 50112-0806; FAX: 515-269-4285; E-mail: SULLIVAC@GRIN1.BITNET.** To assure full consideration, applications must be received by **January 1, 1993.** *Grinnell College is an Affirmative Action/Equal Opportunity Employer and especially seeks women and minority candidates.*

Florida International University (FIU), the State University of Florida at Miami, seeks two tenure-track **ASSISTANT PROFESSORS:** one in **COMPARATIVE VERTEBRATE PHYSIOLOGY** and one in **MARINE BOTANY.** Successful candidates will develop undergraduate and graduate courses in their area of interest and pursue research in their specialty. Ph.D. and a vigorous research program in area of specialization are required; postdoctoral training is preferred. To apply, send curriculum vitae, three letters of reference, and recent publications to: **Chairperson, Comparative Vertebrate Physiologist Search Committee or Marine Botanist Search Committee, Department of Biological Sciences, Florida International University, Miami, FL 33199.** Applications must be postmarked on or before **January 21, 1993.** *FIU is an Affirmative Action/Equal Opportunity Employer and a member of the State University System of Florida.*

ASSISTANT PROFESSORS

The Division of Cardiology in the Department of Medicine invites applications for two Assistant Professor positions. Ph.D. and/or M.D. degrees with three years of postdoctoral training are required. Candidates who wish to develop an independent career in cellular, biophysical or molecular investigation of cardiac function or transmembrane signalling are particularly encouraged to apply. Successful applicants will join an active molecular and cellular cardiology research program in the Department. Opportunities for teaching and/or clinical duties are present. Salary and start-up funds are competitive, and excellent facilities are available. Applicants should submit curriculum vitae and a brief statement of research plans, and request that three letters of reference be sent to: **James D. Marsh, M.D., Director of Research, Division of Cardiology, Department of Medicine, Wayne State University School of Medicine, 421 East Canfield, 1107 Elliman Research Building, Detroit, MI 48201.** *Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

TWO TENURE-TRACK POSITIONS IN PHYSICAL OCEANOGRAPHY UNIVERSITY OF WASHINGTON

The School of Oceanography, University of Washington, invites applications for two tenure-track positions in Physical Oceanography at the **ASSISTANT PROFESSOR** level.

The School is interested in theoreticians, numerical modelers, and seagoing experimentalists. The area of specialization may fit in with current strengths in deep-sea and coastal oceanography or enter developing areas, i.e., estuary/fjord dynamics and global climate change.

Women and minority groups are particularly encouraged to apply. Applications should include curriculum vitae, a one- or two-page statement of current research interests, and the names of four people whom we may contact for letters of reference. Preprints and reprints may be included. The deadline for application is **15 January 1993.** Apply to:

**Professor Arthur Nowell, Director
School of Oceanography, WB-10
University of Washington
Seattle, WA 98195 USA**

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

Postdoctoral Opportunities In The Biomedical Sciences.

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

Mammary Gland Biology **Richard P. DiAugustine, PhD**

The regulation of mammary gland growth and differentiation is being investigated with special emphasis on endocrine and organ factors that may influence breast cancer risk. Studies focus on identification of local growth factor or signalling pathways that mediate the activity of ovarian steroids and the functional properties of the EGF family of polypeptides synthesized by the mammary gland. Experience in biochemistry, molecular biology or endocrinology is preferred. Some technical assistance will be provided. Laboratory of Biochemical Risk Analysis (OE-24), NIEHS, P.O. Box 12233, Building 101, Room D425, Research Triangle Park, NC 27709.

Mechanisms of Gene Regulation **Vera M. Nikodem, PhD**

Two positions are available to investigate the molecular basis of the mechanisms involved in hormonal and developmental control of gene expression. Transacting factors of the steroid/thyroid hormone receptor gene superfamily are being characterized and the evolutionary significance and role of this family of receptors is being studied. Future studies will use homologous recombination to target genes of regulatory nuclear proteins. Genetics and Biochemistry Branch (OE-24), NIDDK, Building 10, Room 8N317.

Molecular Biology **A.J. Fornace, Jr., MD, PhD**

Growth-control genes are activated by genotoxic stress, such as DNA damage, and the role of the p53 tumor suppressor and other factors in the activation of cell-cycle checkpoints in mammalian cells, is being studied. Related stress responses in both cellular and viral (HIV-1) genes may be investigated. Experience in molecular biology is required. U.S. applicants must have less than five years and foreign applicants must have less than three years of postdoctoral experience. Laboratory of Molecular Pharmacology (OE-24), NCI, Building 37, Room 5C09.

Molecular Genetics **Vilhelm Bohr, MD, PhD**

The fine structure of DNA repair is studied with a focus on gene-specific DNA repair, its molecular biology and enzymology, and the biological significance and biological consequences of

efficient repair at this level. Studies utilize mammalian cells, cells from cancer and aging prone human diseases, and cells transfected with repair genes and constructs. Laboratory of Molecular Genetics (OE-24), NIA, Gerontology Research Center, 4940 Eastern Avenue, Baltimore, MD 21224.

Structural Biology **James H. Hurley, PhD**

Positions are available to investigate the structural basis for the regulation of protein kinases involved in calcium- and growth factor-dependent signal transduction. Studies utilize x-ray crystallography to determine and compare the three-dimensional structures of protein kinases in active and inactive states. Previous experience with protein expression, purification, or crystallography is preferred. Laboratory of Molecular Biology (OE-24), NIDDK, Building 2, Room 312.

Tumor Biology **Snorri S. Thorgeirsson, MD, PhD**

The cellular and molecular biology of a stem cell compartment, and the role of these cells in neoplastic development in murine and non-human primate liver, are being studied. Previous experience in protein and nucleic acid biochemistry, cell biology, and tumor biology is required. Laboratory of Experimental Carcinogenesis (OE-24), NCI, Building 37, Room 3C28.

Additional Postdoctoral Fellowship Opportunities

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

Those interested in receiving information on other postdoctoral opportunities in NIH research laboratories, as well as information on clinical training opportunities, may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

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



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892
Equal Opportunity Employer

POSITIONS OPEN

AQUATIC ECOLOGIST/TOXICOLOGIST: ASSISTANT PROFESSOR

The Department of Biological Sciences at Wright State University in Dayton, Ohio invites applications for a tenure-track Assistant Professor position. Candidate's research should relate to the effects of contaminants (natural or xenobiotic) on molecular, cellular, population, and/or community systems, with a strong emphasis on ecological dynamics. Applicants should have a Ph.D. and postdoctoral experience, and will be expected to establish an extramurally funded research program. Teaching duties will include an introductory biology course, an upper-level environmental sciences course, and an upper-level aquatic biology course. Applicants should send curriculum vitae, statements of teaching philosophy and research interests, and names and addresses of three referees to: **Aquatic Ecologist/Toxicologist Search Committee, Biological Sciences Department, Wright State University, Dayton, OH 45435.** We will begin reviewing applications on 1 January 1993. *Wright State University is an Equal Opportunity/Affirmative Action Employer. We encourage women and minorities to apply.*

ASSISTANT PROFESSOR/INVERTEBRATE BIOLOGIST. The Department of Biology of Dickinson College seeks applicants for a tenure-track position in Invertebrate Biology with emphasis in neurobiology or symbiosis. Teaching responsibilities include upper level and introductory courses. The successful candidate will have access to institutional start-up and research funds and will be expected to develop an active research program involving undergraduates. Send curriculum vitae, statement of teaching and research interests, transcripts, and three letters of recommendation by January 15, 1993 to: **Dr. Janet S. Wright, Department of Biology, Carlisle, PA 17013.** Dickinson College is a highly selective liberal arts college with an emphasis on innovative undergraduate science education. *Dickinson is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS IN MARINE SCIENCE: The University of Texas at Austin Marine Science Institute and the Department of Marine Science are soliciting applications for two marine scientists to hold joint appointments as tenure-track **ASSISTANT PROFESSORS** in the Department and as Research Scientists at the Institute. We seek applicants with interests in the cycling of organic matter in marine environments (**Marine Chemist**) and the use of molecular approaches to investigate the structure and function of marine communities or organisms (**Marine Biologist**). Although outstanding applicants in other areas will be considered, Marine Chemists with expertise in stable isotope chemistry, organic geochemistry, or environmental chemistry and Marine Biologists with expertise in molecular techniques are most desirable. Preference will be given to candidates with postdoctoral experience and a strong publication record. Successful candidates will be expected to contribute to graduate and undergraduate education through course instruction and student advisement, and to develop externally funded research programs. The positions receive 75% of annual salary support from the State. The appointees will be resident at the Marine Science Institute in Port Aransas. Send curriculum vitae, statement of research and teaching interests, and names of three references by January 22, 1993 to: **Search Committee Chairman, The University of Texas Marine Science Institute, P.O. Box 1267, Port Aransas, TX 78373.** *The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

GROSS ANATOMIST

Department of Surgery, University of California, San Diego (UCSD): Tenure-track **ASSISTANT PROFESSOR** 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 Anatomy 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 independent 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.*

POSITIONS OPEN

ASSISTANT PROFESSOR, MOLECULAR BIOLOGY: Tenure-track position, Fall 1993 at John Carroll University, a Catholic and Jesuit comprehensive university, offering B.S., M.S. and M.A. degrees. Candidates should be able to teach introductory biology, genetics, molecular genetics, their specialty and have experience in DNA molecular methods. Area of expertise is open, especially interested in population genetics, molecular systematics, developmental biology, gene expression, or plant molecular genetics. Primary responsibility is teaching; academic counseling and research activity are expected. Submit a letter of application, curriculum vitae, statements of teaching and research interests, start-up costs, and three letters of recommendation by January 15, 1993 to: **E. J. Skoch, Department of Biology, John Carroll University, University Heights, OH 44118.** *An Equal Opportunity/Affirmative Action Employer; women and minorities especially encouraged to apply.*

RESEARCH ASSISTANT PROFESSOR OF UROLOGY

The Department of Urology at the Case Western Reserve University School of Medicine seeks applications for Ph.D.'s to direct urologic research. Individuals with expertise and interest in prostate-related research are preferred but those with experience in other urologic-related disciplines will be considered as well. Applicants should be capable of developing a funded research program and be committed to the teaching of graduate and undergraduate students. To apply, send curriculum vitae and names of three references to:

Martin I. Resnick, M.D.
Chairman, Department of Urology
Case Western Reserve University
2074 Abington Road
Cleveland, OH 44106

The University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR. The Department of Psychiatry, Uniformed Services University of the Health Sciences: **TENURE-TRACK** research and teaching position. The Department seeks an individual with research interests to complement ongoing psychosocial, stress and neuroscience research in: stress and illness, neurobiology of anxiety disorders (including PTSD), psychiatric responses to trauma, circadian rhythms, memory, behavioral pharmacology, neurochemical correlates of drugs and behavior, and psychoimmunology. Send curriculum vitae, a description of current and planned research and the names of three references to: **Uniformed Services University of the Health Sciences; CHR-Room A1022, ATTN: SY:LD; 4301 Jones Bridge Road; Bethesda, MD 20814-4799** before 15 March 1993. *Affirmative Action/Equal Opportunity Employer.*

NEUROSCIENCE

Applications are invited for a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** position. A Ph.D. or M.D. and postdoctoral training is required. The candidate is expected to develop an independent and externally fundable research program and to participate in neuroscience teaching. Curriculum vitae, statement of research interests and teaching experience, plus the names of 3 references should be sent by December 15, 1992 to: **Dr. William J. Jackson, Department of Physiology and Endocrinology, Medical College of Georgia (MCG), Augusta, GA 30912-3000.** *MCG IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.*

PHARMACOLOGY FACULTY POSITION

New York Medical College (NYMC) invites applications for a tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Candidates should have a Ph.D. or M.D. degree and at least two years of postdoctoral experience with strong commitments to molecular biological approaches to cardiovascular/renal research. Responsibilities include: development of an independent research program and participation in the teaching programs. Forward curriculum vitae, statement of research interests, and three letters of recommendation to be sent to: **Dr. John C. McGiff, Professor and Chairman, Department of Pharmacology, New York Medical College, Valhalla, NY 10595.** *NYMC is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

Yale Department of Internal Medicine is seeking a Ph.D. at the **ASSISTANT PROFESSOR** level to develop an independent research program integrating social and behavioral influences with clinical and biologic determinants of disease. The research program should emphasize substantive areas of AIDS, women's health and other general medical problems. Interested applicants please send curriculum vitae and supporting materials to: **Ralph Horwitz, M.D., Chief, General Medicine, Yale School of Medicine, P.O. Box 3333, New Haven, CT 06510,** by January 15, 1993. *Yale is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.*



TERRESTRIAL ECOLOGIST

The School of Forestry and Wood Products seeks applications for a nine-month (60% teaching, 40% research), tenure-track faculty position emphasizing ecosystem-based natural resource management. The position will be filled at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level, depending on the qualifications of the individual. We seek those with expertise in ecological processes at the landscape level and in interdisciplinary problem solving. The successful candidate will spearhead development of an applied ecology undergraduate option, teach at least one undergraduate course in applied ecology plus a graduate-level course in her/his specialty, and conduct externally funded research involving M.S./Ph.D. students. Qualifications include Ph.D. in ecology; one degree in natural resource management preferred. Salary will be commensurate with experience and accomplishments. Send curriculum vitae, names of five references (with addresses and telephone numbers), and graduate and undergraduate transcripts to: **Applied Ecology Search Committee, School of Forestry and Wood Products, 1400 Townsend Drive, Michigan Technological University, Houghton, MI 49931.** Applications will be accepted until January 15, 1993, or until an acceptable candidate is found.

Women and minority candidates are encouraged to apply. Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity/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 molecular techniques in the study of whole plant physiology. The candidate will be expected to teach and interact with undergraduate and graduate students.


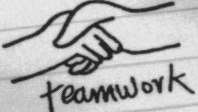

Applicants should send curriculum vitae, statement of research interests, representative reprints, and arrange for three letters of recommendation to be sent by January 15, 1993 to: **Professor F. A. Bazzaz, Department of Organismic and Evolutionary Biology, The Biological Laboratories, 16 Divinity Avenue, Cambridge, MA 02138.**



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

FACULTY POSITION

The Department of Anatomy and Cell Biology invites applications for a tenure-track, full-time faculty position at the level of **ASSISTANT/ASSOCIATE PROFESSOR.** The incumbent's research program should utilize cellular and/or molecular approaches and add to the existing strengths of the Department in the neurosciences, vision sciences and developmental biology. The successful candidate will be expected to establish an independently funded research program. Participation in the medical gross anatomy and graduate student program is expected. Excellent start-up funds and facilities are available. Candidates should submit curriculum vitae, statement of research interests and the names of three references to: **Dr. R. Skoff, Professor and Chairman of Search Committee, Department of Anatomy and Cell Biology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

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scientific excellence + teamwork + resources for growth

$[H_2O + NaCl + \text{sun} + \text{moon}]$ +  +  = Pfizer Research
a great location + recognition + rewards

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

Molecular Biologists – BS/MS Scientists

Gene Discovery—We are seeking BS or MS level candidates with demonstrated experience in molecular biology and recombinant DNA techniques to participate in all aspects of identifying new targets for drug discovery research. A background in gene cloning, library screening, DNA sequencing and computer sequence analysis, and expression of cDNA sequences is highly desirable.

Transgenic Technology—In recognition of the important role transgenic animals play in modeling a variety of human diseases, we are expanding our transgenic animal group. We are seeking individuals with a BS or MS and a minimum of 2 years laboratory expertise in the generation of transgenic animals by pronuclear microinjection and/or embryonic stem cells.

Protein Structure/Function—We are seeking BS or MS level candidates with a degree in Biochemistry or a related field to assist in the application of new and emerging technologies in protein chemistry. The successful candidates should have 2+ years experience with molecular biology, assembly of DNA constructs, and site-directed mutagenesis. Familiarity with recovery and purification of recombinant DNA-derived proteins and biophysical methods for protein structural analysis is desirable.

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



Central Research

The elements of success.

Carolina Workshops
University of North Carolina at Chapel Hill
LIGHT MICROSCOPY FOR THE BIOMEDICAL SCIENCES
April 18-24, 1993

An introduction to the basic concepts and practical applications of light microscopy. Students will have opportunities for extensive hands-on experience with state of the art optical, video and digital image processing and recording equipment guided by experienced academic and commercial staff. Lectures and laboratory exercises will include: Geometrical and wave optics of image formation and microscope alignment, generating image contrast by various optical methods including phase contrast, reflection interference contrast, polarization and differential interference contrast, fluorescence microscopy and fluorescent molecular probes, principles of video imaging and contrast enhancement by analog and digital image processing, introduction to quantitative fluorescent microscopy and applications to digital imaging microscopy to ratio measurements of calcium or other ions in cells, fluorescence *in situ* hybridization (FISH), and introduction to confocal light microscopy methods. Students are encouraged to bring their own specimens for analysis. Tuition is \$950.00. Deadline February 11, 1993.

Instructors:

Edward Salmon, Ph.D., Brian Herman, Ph.D., John Lemasters, M.D./Ph.D., UNC-CH

IN VITRO MUTAGENESIS

June 6-June 19, 1993

This course features the use of randomly mutagenized oligonucleotides to produce "complete" mutant libraries. Streamlined DNA sequencing methods necessary for the execution of saturation mutagenesis projects will also be emphasized. Participants interested in bringing materials related to their own research interests should consult the instructors in advance. Tuition is \$2,150. Deadline-April 5, 1993.

Instructors:

Daniel Loeb, Ph.D., Univ. of Wisconsin, Clyde Hutchison, Ph.D., UNC-CH

TRANSCRIPTION

July 18-July 31, 1993

Students will be introduced to mammalian and invertebrate transcription systems. Specific techniques include: nuclear run-on analysis, preparation of transcription extracts, DNA footprinting and mobility shifts, and *in vitro* RNA processing. Tuition is \$2,150. Deadline-May 17, 1993.

Instructors:

William Marzluff, Ph.D., UNC-CH, Jane Azizkhan, Ph.D., UNC-CH, Ryszard Kole, Ph.D., UNC-CH, David H. Price, Ph.D., University of Iowa

CAROLINA WORKSHOPS are a series of intensive hands-on laboratory courses designed to teach cutting edge methods. The microscope workshop will cover both basic concepts of light microscopy as well as an introduction to the most recent advanced techniques. The molecular biology workshops will include basic manipulations such as isolation of insert and vector DNA, ligations, electrophoretic analysis and elution from gels, blotting techniques, preparation and labeling of probes, identification of cloned DNA, and protein purification in addition to training on a specialized topic.

Many applicants to the Carolina Workshops already hold the M.D. or Ph.D. degree. Our courses are heavy on hands-on contact with the protocols, light on lectures concerning the basics. Applicants unfamiliar with the theoretical basis of molecular biology may profit from reading a text such as *Principles of Gene Manipulation* (Fourth Edition) by R. W. Old & S. B. Primrose, Blackwell Scientific Publications, 1990). Experience with running these courses for ten years now indicates that both students with and without any prior hands-on experience with molecular techniques find these courses useful. Experienced students benefit from in-depth interaction with the instructors; novices learn the realities behind the innocent looking protocols.

To apply, send a curriculum vitae and a brief letter describing your research interests and their relevance to the Workshop for which you apply. Applicants should contact the program office as soon as possible. Please indicate your complete mailing address and telephone/fax number. Full consideration will be given to applications received by the indicated deadlines.

For further information or to apply, contact:

Dr. Wayne Litaker, Facility Director
University of North Carolina at Chapel Hill
Program in Molecular Biology & Biotechnology
402 Taylor Hall CB 7100 S
Chapel Hill, North Carolina 27599-7100
TELEPHONE (919) 966-1730, FAX (919) 966-6821

CELLULAR PHYSIOLOGIST

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 Research Institute is a premier facility which provides a stimulating environment for scientists working in all aspects of discovery and development.

Successful candidate will join our multidisciplinary team of scientists dedicated to the discovery of novel approaches for the treatment of diabetes, with special emphasis on the regulation of insulin secretion. The successful candidate will have made significant contributions to our understanding of key steps in the excitation-secretion coupling pathway, including second messenger or intracellular ion regulation, as it relates to normal or aberrant islet function.

We seek an energetic investigator who possesses a Ph.D. in Physiology, Biochemistry, Biophysics, or a related discipline, with previous research experience in cellular endocrinology with emphasis on signal transduction.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, WHICH MUST INCLUDE POSITION TITLE and salary history, to: Human Resources Department, Job # 9115B009-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V.

Glaxo Inc.

BIOCHEMISTRY AND MICROBIOLOGY UNIVERSITY OF VICTORIA VICTORIA, BRITISH COLUMBIA CANADA

The Department of Biochemistry and Microbiology invites applications for a full-time, tenure-track appointment at the Assistant Professor level in an area of Immunology/Virology/Biochemistry/Microbiology. Exceptional candidates in other research areas are invited to apply. The successful candidate will be expected to teach in our broadly based undergraduate program and to establish a vigorous independent research program.

Our Department consists of 12 full-time faculty members with strong research programs in molecular aspects of Biochemistry and Microbiology. Current departmental enrollment is 200 undergraduate majors, 13 M.Sc. students and 15 Ph.D. students.

The deadline for application is January 31, 1993. Applicants should send their curriculum vitae, together with copies of recent publications, a short description of future research interests, and the names and addresses of three referees to:

Dr. Rozanne Poulson
Faculty Search Committee
Department of Biochemistry and Microbiology
University of Victoria
P.O. Box 3055, Petch Building
Victoria, British Columbia V8W 3P6
Canada

Applicants are advised to ask their referees to send confidential reports directly to the Department without waiting to be contacted.

The appointment will be made in accordance with Canadian Immigration requirements. Priority will be given to Canadian citizens and permanent residents of Canada. *The University of Victoria is an employment equity employer and encourages applications from women, persons with disabilities, visible minorities, and aboriginal persons.*

DEPARTMENT OF BIOLOGICAL SCIENCES

ST. JOHN'S
UNIVERSITY
NEW YORK

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/F.



Marine Scientist

The Alabama Marine Environmental Sciences Consortium (MESC) announces the availability of a position for a Marine Scientist at the Assistant/Associate Professor level to complement a growing program in estuarine/shelf processes. We are seeking candidates who can interact and collaborate with a diverse faculty of twelve ecologists and oceanographers. Research interests could include organism/sediment interactions, food web structure and trophic dynamics, or invertebrate larval transport and settlement.

Successful applicants are expected to develop a vigorous research program and must have demonstrated a strong potential to attract extramural funding. Teaching responsibilities normally include two courses per year (on the quarter system). Courses are taught year round, with a summer program of nearly 100 undergraduate and graduate students in residence. Graduate student advisement is strongly encouraged and may be facilitated by joint appointment at an MESC member university. Such an appointment is negotiated through the MESC administration. Salary is for 10 months and is competitive.

The MESC is an independent agency of Alabama higher education, with 21 member schools from around the state. It is housed at the Dauphin Island Sea Lab, a 36-acre campus located on Dauphin Island, 35 miles south of Mobile, Alabama. The Sea Lab, located at the confluence of Mobile Bay and the Gulf of Mexico, includes offices, laboratories, library, dormitories and cafeteria facilities. Support facilities include: the 65' R/V A.E. Verrill, the 42' R/V Deborah D. and numerous smaller vessels, and a 15,000 gallon recirculating seawater system and wet lab.

Applications including c.v. and a statement of research and teaching interests, along with names and addresses of three references, should be sent to:

Marine Scientist Search Committee
Marine Environmental Sciences Consortium
P.O. Box 369
Dauphin Island, AL 36528
(205) 861-2141

Applications must be post marked by February 5, 1993, with an anticipated, but negotiable, starting date of September, 1993. *The Marine Environmental Sciences Consortium is an equal opportunity/affirmative action employer. The Marine Environmental Sciences Consortium does not discriminate on the basis of race, religion, color, sex, age, national origin or physical ability.*

Wyeth-Ayerst Research

We're building on our success

Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability.

As a GLOBAL research-based pharmaceutical company, we are committed to helping people lead healthier lives through innovative pharmaceutical and nutritional products. It is from this commitment and position of strength that we move forward with a major expansion of our research and development activities.

PRINCIPAL SCIENTIST Clinical Support

Participate in development of new antibacterials. Perform research to define *in vitro* and *in vivo* competitive advantages of new antibacterials. Ph.D. in Microbiology with experience in general and clinical microbiology and general and microbial biochemistry required. Background in immunological and molecular biological techniques and models of infectious disease desirable with a minimum of five years related laboratory experience.

Senior Molecular Biologists Senior Microbiologists Senior Biologists

Participate in the development of new vaccines/antibacterials against microbial diseases and of new models for such diseases. Ideal candidates will have solid experience in basic techniques used in microbiology/bacteriology, immunology, virology, tissue culture, or molecular biology. These positions require a B.S./M.S. in the appropriate scientific discipline (Molecular Biology, Biology, Immunology, Microbiology, Biochemistry) with 4-5 years related laboratory experience. Experience with monoclonal antibody production or *in vivo* models of microbial diseases preferred for some positions.

Wyeth-Ayerst offers an attractive salary, comprehensive benefits package and opportunities for advancement for the right candidate. For immediate consideration, forward your resume and salary history/requirements to: **Wyeth-Ayerst Research Personnel, Dept. SG, P.O. Box 8299, Philadelphia, PA 19101-0082.** Equal Opportunity Employer, M/F/D/V responses encouraged.



Leading The Way for a Healthier World

POSITIONS OPEN

BEHAVIORAL PHYSIOLOGIST

Applications are invited for a tenure-track position in behavioral physiology at the **ASSISTANT or ASSOCIATE PROFESSOR** level. We are especially interested in candidates who work at the organismal level with vertebrates and whose research would complement existing programs in sensory biology, behavior, and evolution. Successful candidates would be expected to contribute to undergraduate and graduate instruction and to establish an independent research program. Competitive salary, facilities, and start-up funds are available. Submit curriculum vitae, statement of research interests, reprints of three most significant papers, and have at least three letters of reference sent by January 15, 1993, to: **Behavioral Physiology Search Committee, T.H. Morgan School of Biological Sciences, 101 Morgan Building, University of Kentucky, Lexington, KY 40506-0225.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST

The Department of Otolaryngology at the University of Pittsburgh School of Medicine is accepting applications for a full-time molecular biologist at the **ASSOCIATE PROFESSOR** level to begin on July 1, 1993. This appointment will be in the tenure stream with a secondary appointment in the Department of Molecular Genetics and Biochemistry. The salary range is \$55,000 to \$75,000 per year plus fringe benefits. This faculty appointment is intended to establish a leadership role in scientific investigation aimed at establishing the genetic basis for the development of head and neck carcinoma. The appointee will participate in faculty teaching obligations and interact with other scientists in the Pittsburgh Cancer Institute community while establishing a solid base of extramural funding. The minimal objective qualifications include a Doctorate of Science degree with significant experience in molecular biology. It is desirable that the candidate have some extramural funding. Qualified applicants should send current curriculum vitae with a letter of interest to: **Jonas T. Johnson, M.D., Department of Otolaryngology, University of Pittsburgh School of Medicine, The Eye & Ear Institute, 203 Lothrop Street, Suite 500, Pittsburgh, PA 15213; Telephone: (412) 647-2130.** In order to ensure full consideration, application materials must be received by February 1, 1993. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK POSITIONS ASSISTANT OR ASSOCIATE PROFESSOR OF PHYSIOLOGY

The University of Tennessee, Memphis, Department of Physiology and Biophysics has tenure-track positions at the rank of Assistant Professor or Associate Professor. Candidates should have a Ph.D. or M.D. degree, a good track record in publications, and postdoctoral research experience with a background in cellular and/or molecular biology. The abilities to establish an independent research program in the areas of cardiovascular, gastrointestinal, developmental, endocrine or epithelial physiology and to engage in teaching activities of the department are expected. Applicants send curriculum vitae, copies of three representative publications and the names of three references to: **Dr. Leonard R. Johnson, The Thomas A. Gerwin Professor and Chairman, Department of Physiology and Biophysics, 894 Union Avenue, Memphis, TN 38163.** *AN EQUAL OPPORTUNITY/TITLE IX/SECTION 504/ADA/AFFIRMATIVE ACTION EMPLOYER. MINORITIES AND WOMEN ARE ENCOURAGED TO APPLY.*

ASSISTANT DIRECTOR OF SCIENTIFIC INFORMATION

Growing medical education agency seeks Ph.D. in microbiology, pharmacology, or neurosciences with strong communication skills to develop and coordinate educational programs for pharmaceutical and biotech companies. Identify pertinent references; interact with consultants; direct writers of monographs, slide programs, and CME; provide medical and marketing evaluation. Clinical research experience required. Experience with Alzheimer's and infectious disease a plus. Excellent opportunity for transition from academia. Medical benefits available. FAX or mail résumés to: **Laurie Towle, Ph.D., Medical Director, Applied Clinical Communications, Four Century Drive, Parsippany, NJ 07054. FAX: (201) 538-5959.**

POSITIONS OPEN

ANIMAL DEVELOPMENTAL BIOLOGIST: Ph.D. **ASSISTANT/ASSOCIATE PROFESSOR.** Teach and direct undergraduate research in developmental biology, have education to teach cell biology and contribute to introductory biology. Send curriculum vitae and three letters of reference that address teaching and research potential by January 18, 1993 to: **R. Wodzinski, Biology Search Committee, Ithaca College, 953 Danby Road, Ithaca, NY 14850-7278.** *Ithaca College is an Affirmative Action/Equal Opportunity Employer.*

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 undergraduate 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 Comparative Zoology, Department of Organismic and Evolutionary Biology, 26 Oxford Street, Cambridge, MA 02138.**

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

CURATORIAL POSITION IN MAMMALOLOGY AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Mammalogy invites applications for a tenure-track curatorial position to be available 1 September 1993. Rank and salary shall be determined based upon qualifications and experience. The successful applicant will be expected to pursue independent research in systematic mammalogy based on active fieldwork, use of the Museum's collection resources, and on such other laboratory and analytic approaches in which he or she may be competent. (Those approaches may include, but are not restricted to, cytological, biochemical or morphometric analyses.) Applicants must demonstrate an ability to apply systematic data in testing hypotheses of phylogenetic relationships, biogeography, evolutionary theory, or other areas of general biological interest. Curation of the Department's collections, participation on Museum committees and in the Museum's exhibition program, and membership in appropriate professional societies are other important requisites of employment. The successful applicant must have the ability or potential to assume the chairmanship of the Department of Mammalogy at some point in his or her career. All requirements for the Ph.D. must be completed by the time of appointment. Applications should include (a) a statement of research interests and professional goals; (b) curriculum vitae; (c) complete bibliography; and (d) the names, addresses, and telephone numbers of at least five persons familiar with the applicant's qualifications. Applications should be submitted by 2 February 1993 to: **Dr. Guy G. Musser, Chairman of Search Committee, Department of Mammalogy, The American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024, U.S.A.** *An Equal Opportunity Employer.*

BIOREMEDIATION MICROBIOLOGIST

Applications for a **TENURE-TRACK FACULTY** position to begin in Fall 1993 are invited. A Ph.D. degree and postdoctoral or the equivalent industrial experience is required. The successful candidate will be expected to teach in the department's developing biotechnology program and to establish an extramurally funded research program based on the utilization of microbial systems for bioremediation. A commitment to excellence in teaching is expected. Funding for this position is contingent on expected budgetary approval. Applications, including curriculum vitae, statement of research interests, and three letters of recommendation should be sent by February 1, 1993 to: **Chairman, Bioremediation Search Committee, Department of Biology, George Mason University, Fairfax, VA 22030-4444.**

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

POSITIONS OPEN

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 imaging techniques. It is desirable that applicants have a publication record and an active interest in the neurobiology of aggression. Current extramural funding is required. 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.*

DIRECTOR BIOTECHNOLOGY DIVISION UNIVERSITY OF ARIZONA CONTINUATION OF SEARCH

The University of Arizona invites applications and nominations for the position of Director of the Biotechnology Division. Researchers from the Colleges of Agriculture, Arts and Sciences, Engineering and Mines, Medicine, and Pharmacy at the University of Arizona have combined their efforts to develop a University-wide Biotechnology program. The program has nine support facilities staffed by 20 professional and technical personnel with an annual operating budget of more than \$1.5 million. The program is intended to provide interdisciplinary support and training to researchers at the state's universities, the state and the nation.

The nine facilities specialize in Biomaterial Processing, Biomolecular Characterization, Cell Sorting, Electron Microscopy, Hybridoma Technology, Macromolecular Structure, Structural and Molecular Biology Computing Facility, Molecular Systematics, and Biological Magnetic Resonance.

We seek an individual with an outstanding record of accomplishment using Biotechnology in her/his research program who also possesses the orientation to provide service and support for researchers in the broad field of biotechnology, as well as the skills, vision, and scientific and educational accomplishments and interests necessary to provide scientific and academic leadership in the field. It is expected that the selected candidate would possess the outstanding academic credentials consistent with an appointment in an appropriate academic department. Qualified applicants are invited to submit up-to-date and comprehensive curriculum vitae (including list of publications); a statement of their views, recommendations, and aspirations for the Biotechnology Division; and the names, addresses, and telephone numbers of at least three references to: **Biotechnology Search Committee, 225 Life Sciences South, University of Arizona, Tucson, AZ 85721.** All application materials must be received by **January 15, 1993** or until the position is filled.

This is a national search which is not limited to candidates at the University of Arizona. *The University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are especially encouraged to apply.*

CHAIR, DEPARTMENT OF MICROBIOLOGY

The University of South Dakota School of Medicine invites nominations and applications for the position of Chair of the Department of Microbiology. Candidates with a Ph.D. or M.D. degree and research experience in any area of microbiology or immunology are encouraged to apply. The successful candidate must have demonstrated leadership capabilities, a distinguished research record, and a genuine commitment to excellence in medical and graduate education. Initial review of applications will begin January 15, 1993, and will continue until the position is filled. *Applications from qualified women and minorities are particularly encouraged.* Candidates should submit a letter of application, curriculum vitae, statement of research interests, and names of at least three references to: **Ronald Lindahl, Ph.D., Chair, Microbiology Search Committee, Department of Biochemistry and Molecular Biology, University of South Dakota School of Medicine, Vermillion, SD 57069.** *The University of South Dakota is an Affirmative Action/Equal Opportunity Employer.*

**FACULTY POSITIONS IN MOLECULAR
GENETICS
COLLEGE OF MEDICINE · UNIVERSITY
OF FLORIDA**

The Center for Mammalian Genetics in the College of Medicine at the University of Florida invites applications for tenure track positions at the level of Assistant Professor. The Center will fill 5 faculty positions in the general field of mammalian molecular genetics over the next 4 years. Successful applicants will join a group of 17 faculty with interests in the areas of human, mouse and yeast genetics. Applicants with interests in the areas of human genetics, developmental genetics, gene therapy, neurogenetics, and immunogenetics are especially sought, although outstanding candidates with research interests in any area of molecular genetics are urged to apply. The Center is housed in the recently opened Academic Research Building and offers excellent laboratory facilities, competitive salaries, and attractive start-up packages for highly qualified candidates. Extensive interactions with faculty in various departments within the College of Medicine are available and the Center provides outstanding core facilities for supporting state of the art research in molecular genetics. Faculty appointments will be in a department appropriate to the candidates' expertise and interests.

Candidates should have received a Ph.D. and/or M.D. degree and should have strong research training including postdoctoral experience in the field of molecular and mammalian genetics. Applicants should provide a curriculum vitae, a description of research experience and interests, and have three letters of reference sent to **Dr. Edward K. Wakeland, Director, Center for Mammalian Genetics, Office of the Dean, College of Medicine, University of Florida, Gainesville, FL 32610-0215.** Deadline for completed applications is **February 1, 1993.**

The University of Florida is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.

**RESEARCH OPPORTUNITIES
MINERALS R&D**

RESEARCH MICROBIOLOGIST: Senior technical scientist on research team investigating fundamental and applied aspects of minerals bioprocessing. Plans and implements laboratory studies on bioleaching of ores and bioflocculation of fine mineral suspensions; leads and coordinates activities of subordinate staff; publishes results in peer reviewed journals; formulates research proposals. The ideal candidate will have demonstrated significant scientific accomplishments in minerals or metals biotechnology, or related disciplines such as environmental or soils microbiology. Ph.D. preferred. Starting salary range \$32,423 to 46,210. Duties and salary commensurate with qualifications and experience.

RESEARCH CHEMIST/BIOCHEMIST: Project chemist on minerals bioprocessing research team. Ideal candidate will have knowledge of biological processes and inorganic chemistry. HPLC experience helpful. Minimum requirements, B.S./B.A. degree plus two years professional experience or postgraduate education. Starting salary range \$26,798 to 32,423. Duties and salary commensurate with qualifications and experience.

INORGANIC CHEMISTS, CHEMICAL/METALLURGICAL ENGINEERS: Both entry and advanced positions are available to conduct research on a variety of minerals processing and environmentally related problems.

Please send resume to: Michael Mann, Personnel Specialist, U.S. Bureau of Mines, 1605 Evans Ave., Reno, NV, 89512. Ph. (702) 334-6642. The U.S. Government is an equal opportunity employer. U.S. citizenship required.

UNITED STATES BUREAU OF MINES

Challenging Research Opportunities

LIGAND Pharmaceuticals is a rapidly expanding drug discovery company which seeks to identify, develop and commercialize novel drugs which modulate the action of hormones and related regulatory molecules within the body. You can be part of a team which discovers drugs for treatment of cancer and a variety of dermatological, cardiovascular and inflammatory diseases. Ligand employs state-of-the-art drug design techniques, classical pharmacology, and cutting-edge molecular biology in an integrated approach to drug discovery. Currently, we are seeking the following individuals.

New Leads Discovery: Senior Research Manager with PhD in Biochemical Pharmacology or Cell Biology and 2-8 years of postdoctoral experience. Successful candidate will be responsible for developing new assays, as well as supervising 4-8 BS/MS-level staff members. Experience in high through-put drug screening/assay development and cell biology is strongly preferred. Dept. 730/MG.

Molecular Modeler with PhD in Chemistry or related discipline and 1-3 years' experience in correlating molecular structure and function of small organic molecules. Knowledge of the full range of molecular modeling techniques is essential, industrial experience is desired. The successful candidate will work closely with interdisciplinary scientific teams to aid in the design of novel drug candidates. Dept. 760/AN.

PhD Chemists with 1-3 years' industrial experience in organic synthesis, bio-organic or medicinal chemistry and an aptitude for the design and synthesis of biologically active molecules. Creativity, a commitment to excellence and the desire to work in a multidisciplinary environment are essential qualities for these positions. Dept. 760/AN.

BS and MS Chemists with 1-2 years' industrial experience in organic synthesis, natural products isolation, or related areas, and experience in chromatographic and spectroscopic techniques (HPLC, NMR). The successful candidate will work with a team of Chemists and will be responsible for the synthesis, isolation, and structure elucidation of novel organic compounds for biological evaluation. Dept. 760/AN.

Senior Research Pharmacologists with PhDs in either Pharmacology or Toxicology, with 2-4 years of experience studying the absorption, distribution, metabolism, and excretion of xenobiotics. The successful candidate will become part of a multidisciplinary research team, dedicated to the discovery of novel therapeutic agents. A knowledge of the toxicology and regulatory requirements necessary to characterize novel agents for clinical evaluation is necessary. Dept. 740/EU.

Research Associates with BS and/or MS degrees in Pharmacology, Biochemistry, Physiology, or Biology with 1-2 years' experience in a laboratory setting. Research Associates will work with a Senior Scientist and be involved in conducting pharmacology and/or drug metabolism studies. The successful candidates will have a desire to work as a member of a research team, and to provide intellectual input into experimental design and data interpretation. Dept. 740/EU.

Ligand provides an exciting intellectual environment with modern research facilities. We offer competitive salaries commensurate with your experience and education, a comprehensive benefits package, equity participation, and ample opportunities to have scientific impact. For confidential consideration, please submit your resume or CV referencing the department number to: **LIGAND Pharmaceuticals, Director of Human Resources, 9393 Towne Centre Drive, San Diego, CA 92121. EOE.**



LIGAND
PHARMACEUTICALS

ENVIRONMENTAL SCIENCE

The Environmental Science Group at the University of San Francisco invites applications for a tenure-track position in Environmental Science at the Associate or Full Professor level anticipated to begin in the Fall of 1993. The appointment will be in the Biology, Chemistry, or Physics Departments with primary teaching responsibilities in Environmental Science.

Program. The interdisciplinary Environmental Science Group includes full-time faculty from several different departments, and part-time faculty from federal, state, and local agencies as well as private industry. The Group administers programs leading to a bachelor of science degree in Environmental Science, and a master's degree in Environmental Management.

Teaching Responsibilities include undergraduate courses in Environmental Science as well as one or more of the following graduate level courses in the Environmental Management program: Environmental engineering, toxicology, risk assessment, pollution ecology, air resource monitoring, hazardous waste management, and other areas of professional interest.

Qualifications. University teaching experience, evidence of scholarship, an earned doctorate, experience in environmental management (preferably in industry or government), and an understanding of and commitment to support the mission of the University are required. The successful candidate is expected to play a major role in coordinating, as well as teaching in the master's program in Environmental Management. The faculty member will be expected to develop an independent and ongoing research program.

We particularly encourage minority women applicants for all positions. The University of San Francisco is an Equal Opportunity and Affirmative Action Employer.

Applicants should submit a letter of application, curriculum vitae, transcripts, brief description of research plans, evidence of teaching ability and three letters of recommendation to:

Environmental Science Search Committee

c/o R. James Brown
Chair, Environmental Science Group
University of San Francisco
2130 Fulton Street
San Francisco, CA 94117-1080

Consideration of applications will begin on **November 30, 1992** and will continue until the position has been filled.

Established as San Francisco's first institution of higher learning in 1855, the University of San Francisco is a private, Catholic and Jesuit institution with an enrollment of 7,300 students. The University's principal mission is the liberal education of students in the arts and sciences, as well as the preparation of professionals for education, nursing, business, and law.

BE A SCIENCE JOURNALIST FOR A SUMMER!

The American Association for the Advancement of Science (AAAS) invites students in the natural and social sciences and engineering to apply for the 1993 Mass Media Science and Engineering Fellows Program.

Fellows work as reporters, researchers and production assistants for 10 weeks during the summer at newspapers, magazines, and radio and television stations nationwide. A weekly \$400 stipend is awarded plus travel expenses paid. For information and application write:

**Mass Media Science and
Engineering Fellows Program
AAAS**

1333 H Street, NW
Room 1134
Washington, DC 20005

**Application deadline:
January 15, 1993**

Department of Biochemistry Faculty of Science Kuwait University

The Department of Biochemistry invites applicants to fill posts in the following specialties:

**Molecular Biochemistry
Physical Biochemistry
Clinical Biochemistry**

Applicants should currently hold the rank of Associate Professor (Senior Lecturer). Applications and Conditions of Service may be obtained from:

**Kuwait University Office
3500 International Drive NW
Washington, DC 20008
Tel: 202-363-8055**

Completed applications must be returned directly to:

**Head of the Department
Biochemistry Department
Faculty of Science
Kuwait University
P.O. Box 5969
13060 Safat
KUWAIT**

Chair, Department of Immunology

Research Institute of The Cleveland Clinic Foundation

We are seeking a Chair for the newly reconstituted Department of Immunology. The Research Institute has a long standing commitment to excellence in basic and applied biomedical research with an annual budget in excess of \$50 million. The establishment and expansion of this department recognizes the Clinic's traditional excellence in transplantation, tumor immunology and rheumatology, and its commitment to the study of immunologically based diseases and basic immune mechanisms. The present department consists of nine scientists with active research programs in regulation of T-cell function, or monocyte/macrophage mediated inflammation. We are seeking candidates with outstanding national reputations as molecular or cellular immunologists with the vision and energy to recruit other talented scientists to build a world class program. The Chair will be provided with generous space and start-up support including substantial endowment funds.

Salary and fringe benefits are highly competitive. A curriculum vitae and names and addresses of three references should be sent to Dr. Bryan R.G. Williams, Search Committee for the Chair of Immunology, Cleveland Clinic Research Institute, NN1-06, 9500 Euclid Avenue, Cleveland, Ohio 44195.

**THE CLEVELAND CLINIC
FOUNDATION**

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**PRE- AND POSTDOCTORAL
POSITIONS IN CELLULAR AND
MOLECULAR ASPECTS OF
ENVIRONMENTAL PATHOLOGY**

The Environmental Pathology Training Program at the University of Vermont is an NIEHS-funded, multi-departmental program focused on the molecular biology, biochemistry and cell biology of environmental pathology; Pre- and post-doctoral positions are available to U.S. citizens. In addition to a basic research experience, trainees have numerous educational opportunities through course work and a seminar series. Faculty include:

R. Albertini—environmental T-cell mutagenesis; **J. Chlu**—chemical hepatocarcinogenesis; **J. Craighead**—viral induced diabetes; asbestos induced mesothelioma; **J. Evans**—pulmonary remodelling processes; **B. Hart**—molecular toxicology; pulmonary defense mechanisms; **N. Neintz**—initiation of replication; **S. Huber**—virus-induced autoimmunity; **Y. Kow**—enzymology of DNA repair; **R. Low**—pulmonary repair mechanisms; **I. Macara**—function and regulation of small, RAS-like GTPases; **B. Mossman**—chemical and physical carcinogenesis; asbestosis; **J. Nicklas**—human somatic mutation; **D. Taatjes**—immuno-electron microscopy; **R. Tracy**—diet and cardiovascular disease; **T. Tritton**—role of plasma membrane in cell injury and death; **B. Van Houten**—DNA repair mechanisms; **S. Wallace**—DNA damage and repair.

Postdoctoral candidates should have an MD, DVM or PhD degree and a desire to develop a career integrating molecular and cellular studies while exploring the challenge the environment places on living systems. *The University of Vermont invites and encourages applications from women and members of minority groups.* Send curriculum vitae and references to: **Joanne Teel, MD, University of Vermont, Department of Pathology, Burlington, Vermont 05405.**

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

BIOELECTRONICS

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**Consorzio di Ricerca
Industriale Avanzata**

Via Roma, 28

I-57030 MARCIANA (LI)

ITALIA

Tel +39(565)901062 -

Fax +39(565)901283

The industrial consortium on bioelectronics research Technobiochip has several openings in its laboratories in Marciana, Italy, on the Island of Elba. Scientists are sought for in the following fields:

Thin films of biopolymers (deposition and characterization)

Biosensors

Atomic microscopy of biopolymers

The ideal candidate holds a PhD and/or has experience in the relevant fields.

He/She should send his/her detailed resume and a statement on his/her research interests.

**“People come here seeking challenge.
We don't disappoint them.”**

Ciba Corning is a young company with a history of achievement. Today, as a wholly-owned subsidiary of CIBA, we have become a world leader in the development and manufacture of medical diagnostic instrumentation for the healthcare industry. A customer-driven technologically strong, quality-conscious organization, our growth has been the result of our ability to see beyond what is, to what is possible. And at Ciba Corning, the possibilities are unlimited.

Suburban Boston Opportunities

These positions are located at our expanding, state-of-the-art Research and Product Development facility in Walpole, MA, a Boston suburb. Here, you will work with the most advanced tools and technologies and interact with a world class team of technical peers.

■ **Immunoassay Development Scientists**

**Endocrinology, Therapeutic Drugs and
Infectious Disease**

Functioning as a project leader, your background must reflect strong technical knowledge in immunoassay development. Excellent experimental design, statistical analysis and computer skills are required. Supervisory experience is desired. Requirements include: a Ph.D. and 0-2 years, an M.S. and 4-7 years, or a B.S. and 8-11 years of relevant experience. **Please respond to Job Code LM026.**

■ **Immunoassay Development
Associate Scientist**

Endocrinology

To succeed in this position, you will need strong technical knowledge in immunoassay development combined with experimental design, statistical analysis and computer skills. Supervisory experience desired. Requirements include an M.S. and 2-4 years, or a B.S. and 5-8 years of relevant experience. **Please respond to Job Code LW045.**

■ **Ciba Corning offers a competitive salary and benefits package which reflects our corporate commitment to the quality of life as well as work. For confidential consideration, please send resume to the appropriate Job Code, Human Resources Department, Ciba Corning Diagnostics Corp., 63 North Street, Medfield, MA 02052.**

No telephone calls, please. Principals.

Ciba Corning is an Equal
Opportunity/Affirmative
Action Employer, M/F/D/V.

CIBA-CORNING

POSITIONS OPEN

SULTAN QABOOS UNIVERSITY SULTANATE OF OMAN College of Agriculture

Sultan Qaboos University, the National University of the Sultanate of Oman, has a vacancy for **HEAD, DEPARTMENT OF FISHERIES SCIENCE AND TECHNOLOGY**.

The right candidate should have an earned Doctorate and a distinguished record of teaching and research, commensurate with the rank of Professor and must be fluent in English, which is the language of instruction. Experience in fishery science or technology (preferably in the tropics) is especially desired to complement the interests of existing faculty. This is a senior-level position and the starting date is January 1993, with possibility of earlier appointment.

Sultan Qaboos University offers, apart from a very attractive tax-free salary, suitable housing, utility allowance, health care, 60 days of paid vacation per year with round trip air tickets, education allowance for children, etc.

Interested candidates are requested to address inquiries and letters of application, including names and addresses of at least three references to:

**Professor Francis J. Marousky, Dean,
College of Agriculture, Sultan Qaboos University,
P.O. Box 32484, Al-Khod,
Sultanate of Oman**

McGAW CHAIR IN SCIENCE

St. Andrews College is seeking applications for an endowed chair in the natural sciences. Disciplinary focus in either **Molecular Genetics/Biochemistry** or **Analytical/Bioinorganic Chemistry** is preferred. St. Andrews is an innovative liberal arts college with a nationally recognized interdisciplinary core curriculum and a lab science program structured around a "no-walls", integrated laboratory facility where science students have their own personal workspaces available for both course work and independent research. We are seeking a dedicated teacher/scholar, with interdisciplinary interests, who is committed to excellence in science education; has designed and implemented successful research programs involving undergraduates; is familiar with the appropriate use of microcomputers in science education; can enthusiastically communicate scientific concepts to non-scientists (student, colleague, and general public); and can join with science colleagues in articulating the role of science, both historically and in current public policy choices, to students in our core curriculum. Appointment may be at the Associate or Full Professor level. Inquiries should be directed to: **Dr. Dennis McCracken, Telephone: (919) 277-5321**. Applicants should submit curriculum vitae, statement of teaching and research interests, and names of three references to: **McGaw Search Committee, MNHS Division, St. Andrews Presbyterian College, 1700 Dogwood Mile, Laurinburg, NC 28352-5598** no later than January 11, 1993. *St. Andrews is an Equal Opportunity/Affirmative Action Employer. Women and underrepresented minorities, including individuals with disabilities, are especially encouraged to apply.*

CHAIRPERSON

DEPARTMENT OF MICROBIOLOGY, MOLECULAR GENETICS AND IMMUNOLOGY

The University of Kansas School of Medicine invites applications and nominations for the Chair of the Department of Microbiology, Molecular Genetics, and Immunology. Candidates must have a Ph.D. or M.D., with an outstanding record of research accomplishments, commitment to excellence in graduate and medical student teaching, the capability to offer scientific leadership to a diverse department covering the broad discipline of Microbiology and the commitment to lead the department to further prominence. This recruitment is occurring simultaneously with the construction of a new research facility.

Curriculum vitae of applicants and four names of references should be sent to: **S. K. Dey, Ph.D.; Chair, Search Committee; c/o Executive Dean's Office; University of Kansas School of Medicine; 3901 Rainbow Boulevard; Kansas City, KS 66160-7300**. Review of applications will begin January 15, 1993, and will continue until the position is filled. *The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

EXECUTIVE OFFICER. The Barnett Institute of Chemical Analysis and Materials Science at Northeastern University (NU) has an immediate opening for a scientist with strong administrative skills to participate in the development of rapidly growing graduate research and education programs in analytical biotechnology. The successful candidate will oversee the development, and serve as executive director, of the Institute's Center for Analytical Biotechnology. The Center will be a forum for interactions between academic molecular scientists and their counterparts in industry. Candidates should have a Ph.D. in chemistry, biochemistry, or biomedical science and at least two years of postdoctoral or industrial experience. Applications and three letters of reference should be sent to: **Professor Thomas R. Gilbert, Barnett Institute of Chemical Analysis and Materials Science, 341 Mugar Hall, Northeastern University, Boston, MA 02115**. *NU is an Equal Opportunity/Affirmative Action Employer.*

ANNOUNCEMENT OF SEARCH FOR COMPREHENSIVE SICKLE CELL CENTER DIRECTOR

University of South Alabama, College of Medicine

The University of South Alabama, College of Medicine, in Mobile, Alabama announces a search for the **DIRECTOR** of the University's Comprehensive Sickle Cell Center. The Center was funded in 1988 with a budget of \$4.8 million by the National Institutes of Health and has received a renewal for an additional five years extending to 1998. Candidates must hold an M.D. or Ph.D. degree and have the training and experience to provide stability and direction for the Center. The Director must have demonstrated leadership qualities, an intimate working knowledge of the NIH and NHLBI Sickle Cell funding and a record of positive interaction in community affairs. The Search Committee is especially interested in receiving applications from qualified minority candidates. Nominations and personal applications should be sent directly to:

**Joseph H. Coggin, Jr., Ph.D.
Chair, Sickle Cell Center Director
Search Committee
University of South Alabama
College of Medicine, 170 CSAB
Mobile, AL 36688-0002
Telephone: (205) 460-6041**

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

ENVIRONMENTAL PROJECT DIRECTOR. McNeese State University invites applications for the position of Project Director for the Spill Remediation Research Consortium. The Consortium conducts basic and applied research on environmental restoration following the clean up of major oil spills. The Director should have a doctorate; a minimum of three to five years of experience in basic or applied environmental research; and organizational skills including some experience in arranging workshops and conferences. Experience in interdisciplinary projects and grant proposals would be of benefit. Applications will be accepted until the position is filled. Send application, curriculum vitae, and references to: **Dr. Thomas G. Wheeler, P.O. Box 90655, McNeese Station, Lake Charles, LA 70609-0655**. *An Affirmative Action, Equal Opportunity Institution.*

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 **FACULTY 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.*

POSITIONS OPEN

EXECUTIVE DIRECTOR WILLAPA ALLIANCE

Position available immediately for senior staff person of Willapa Alliance Ecosystem Program in southwest Washington state; develop strategic planning process, create annual plans/budgets. Implement organizational policies and objectives. Meets annual and long-range financial objectives and maintains healthy financial position of the organization. Answers to Board of Directors; represents Alliance with public and works with local leadership.

Qualifications: Significant experience in effective management, fund raising, community organization and communication skills. Must be a good listener and sensitive to needs of community and have demonstrated organizational leadership capability.

Send résumé to both:

**Spencer B. Beebe, President
Ecotrust, 1200 NW Front, #470
Portland, OR 97209**

and

**Elliot Marks
The Nature Conservancy
217 Pine Street, Suite 1101
Seattle, WA 98101**

CHAIRPERSON DEPARTMENT OF PHYSIOLOGY

The University of Kansas Medical Center seeks an outstanding scientist to provide leadership and direction for the Department of Physiology. Applications and nominations are invited from scientists with active research in biomedical fields relevant to physiology, preferably in the area of molecular and cellular physiology. The successful candidate must have commitment to fostering excellence in both medical and graduate education. The department has active research groups in Reproductive/Developmental Biology and Neurosciences and the institution is committed to further developing an outstanding department. Please send applications including curriculum vitae, description of research program, and names of three (3) references to:

**Joseph C. Besharse, Ph.D.
Chairman, Physiology Search Committee
Department of Anatomy and Cell Biology
The University of Kansas Medical Center
Kansas City, KS 66160-7400**

The University of Kansas Medical Center is an Equal Opportunity Employer.

CHAIR

Department of Pharmacology/Pharmaceutics/Medicinal Chemistry, College of Pharmacy, University of Houston. Applications/nominations are solicited for the chair of the newly combined department. Candidates must have a Ph.D. in the pharmaceutical/biomedical sciences, appreciation of graduate and professional programs in pharmacy, recognized research excellence, demonstrated administrative skills and an ability to lead. The department offers M.S. degrees in all disciplines and Ph.D. in Pharmacology and Pharmaceutics with research emphasis in drug delivery systems, pharmacokinetics, cardiovascular and neuropharmacology, and molecular mechanisms of aging and disease. The position is available June 1, 1993. Applicant screening will begin in early 1993 and continue until the individual is identified. Send applications containing curriculum vitae and three references or nominations to: **Dr. T. Lemke, Chair Search Committee, College of Pharmacy, University of Houston, Houston, TX 77204-5511**. *Equal Opportunity/Affirmative Action Employer.*

FACULTY FOR EUROPE AND ASIA

The University of Maryland anticipates openings for faculty to teach undergraduate science courses on U.S. military bases overseas. Requirements include the Ph.D. or two master's degrees, recent college teaching experience, *U.S. citizenship*, and competence to teach in two of the following fields: astronomy, biology, chemistry, computer studies, geology, mathematics, and physics. Renewable annual appointments begin August 1993. Frequent travel and the cost of schooling make these positions difficult for those with children. Send résumé to: **Dr. Ralph E. Millis, University of Maryland University College, College Park, MD 20742-1642**. *Affirmative Action/Equal Opportunity Employer.*

U.S. DEPARTMENT OF ENERGY

POSTGRADUATE RESEARCH PROGRAMS

Human Genome **Global Change**
Toxicology **Engineering**
Fossil Energy **Physical Sciences**
Hazardous Wastes **Environmental Sciences**
Fusion Energy **Life Sciences**
Computer Sciences **Risk Analysis**

- Research at national laboratories
- Stipends \$22,200 - \$52,800 depending on degree, program, research area
- Recent graduate degree
- U.S. citizenship or PRA status may be required

Information and applications:

Postgraduate Research Programs
Science/Engineering Education Division
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-7385



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

National Institute of Dental Research National Institutes of Health Public Health Service Department of Health and Human Services

The National Institute of Dental Research (NIDR) invites nominations and applications for the position of Director, Intramural Research Program (IRP), National Institute of Dental Research. The incumbent of this position will direct a program of laboratory and clinical research through eight laboratories and branches with 226 employees and approximately 100 non-ceiling personnel, and an annual budget of approximately 22 million dollars. S/he serves as principal advisor to the Institute Director on scientific affairs involving all Institute direct research programs; develops and recommends policies for the execution of research programs; determines effectiveness of current programs; and recommends and develops new and revised programs to meet national oral and dental health needs.

This is a Civil Service position in the Senior Executive Service. The salary range is ES-1 to ES-6, currently \$90,000 to \$112,000 per annum. The person selected may be eligible for Physicians Comparability pay up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-Federal selectee for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

Applicants must meet the minimum educational requirements (or possess equivalent combination of experience and training) for Dental Officer, GS-680; Medical Officer, GS-602; other biomedical sciences (GS-400 group, GS-1300 group), as defined by the U.S. Office of Personnel Management Handbook X-118, Qualification Standards for Positions Under the General Schedule, which is available in Federal Personnel Offices and Federal Job Information Centers.

Further information about the position and qualification requirements may be obtained by contacting Ms. Judith T. Dulovich, (301)496-6971. An Application for Federal Employment (SF-171), accompanied by a current curriculum vitae and bibliography, should be submitted to:

Ms. Judith T. Dulovich
Personnel Management Specialist
National Institute of Dental Research
National Institutes of Health
9000 Rockville Pike
Bldg. 31, Room 2C-23
Bethesda, MD 20892



APPLICATIONS MUST BE RECEIVED BY JANUARY 15, 1993.

SELECTION FOR THIS POSITION WILL BE BASED SOLELY ON MERIT, WITH NO DISCRIMINATION FOR NON-MERIT REASONS SUCH AS RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN, POLITICS, MARITAL STATUS, PHYSICAL OR MENTAL HANDICAP, AGE, OR MEMBERSHIP OR NON-MEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

Marshall University School of Medicine is seeking applications and/or nominations for the position of **CHAIRPERSON, DEPARTMENT OF MICROBIOLOGY**. Position available July 1, 1993. Candidates should demonstrate strong leadership abilities and teaching experience in medical student and biomedical graduate student education (M.S. and Ph.D.). Candidates must be able to demonstrate a background of research and publications emphasizing molecular microbiology. Candidates must have a Ph.D. and/or M.D. degree and currently be at the level of Associate Professor or Professor. Completed application packet should include letter of interest, explanation of research goals and interests, current curriculum vitae and names and addresses of three references. Position open until filled. Send applications to: **Carl Gruetter, Ph.D., Microbiology Search Committee, Marshall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25704.**

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

MOLECULAR BIOLOGIST DIRECTOR OF CANCER RESEARCH

The Department of Pharmacology of the University of Connecticut School of Medicine has available a state-funded tenure-track faculty position. We seek an individual with the required research and leadership abilities to be the Associate Director for Research of the Connecticut Cancer Institute. The Cancer Institute's mission encompasses three areas; research, patient care and education. The research activities of the Institute will be closely linked to expanding programs in genetics and developmental biology, the transgenic animal facility, and the John Dempsey Hospital's bone marrow transplant unit. Candidates must have a Ph.D. and/or M.D. degree with extramurally supported independent research in some area of cancer research, or in some closely related area of molecular biology. Applicants should send curriculum vitae, a statement of research interest, reprints of three representative papers, and names of at least three references to: **Dr. Maurice B. Feinstein, Department of Pharmacology, School of Medicine, University of Connecticut Health Center, Farmington, CT 06030.** *The Health Center is an Equal Opportunity/Affirmative Action Employer.*

TENURE-TRACK APPOINTMENT, VASCULAR BIOLOGY. The Department of Radiology at the University of Pennsylvania School of Medicine has a tenure-track position effective March 1993. Candidates with a Ph.D. and expertise in the biology of vascular cells will be considered. The position will involve interaction with clinicians concerned with restenosis after angioplasty, permanent and temporary vascular stenting, arterial grafting and thrombolysis. The candidate will join a large research department with areas of interest in cardiovascular imaging, magnetic resonance imaging, and interventional radiology. Successful candidate will be expected to establish an extramurally funded research program. Academic rank and salary will be commensurate with experience. Interested parties should forward curriculum vitae and summary of research interests to: **Michael J. Pentecost, M.D., Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION DEVELOPMENTAL BIOLOGY/ BIRTH DEFECTS

POSTDOCTORAL POSITION available immediately at Thomas Jefferson University in developmental biology/birth defects of the gastrointestinal tract. Nationally funded project with competitive salary. Molecular biology experience required. Projects include: (1) studies involving the *in vitro* and *in vivo* molecular analysis of the normal and abnormal development of the gastrointestinal tract with primary focus on gastrointestinal smooth muscle myogenesis, or (2) the molecular and/or genetic analysis of several mutant mouse models of gastrointestinal/smooth muscle development. Send curriculum vitae, summary of research interests and three references to: **Dr. Kirk M. McHugh, Department of Anatomy and Developmental Biology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

MICROBIOLOGIST: Faculty Position in the Molecular and Cellular Biology Division, Department of Biological Sciences, University of California, Santa Barbara. The MCB Division of the Department of Biological Sciences has an opening for a tenure-track faculty appointment effective July 1, 1993, at the **ASSISTANT PROFESSOR** level. Ph.D. normally required by time of appointment. We are seeking candidates in any one of a number of areas of prokaryotic molecular biology including mechanisms of signal transduction, mechanism and control of DNA replication and recombination, transposon biology, or mechanism and control of cell secretion. This appointee will be responsible for teaching bacterial physiology/gene regulation, offered as part of our undergraduate microbiology major core course, participating in graduate instruction, and establishing an active and competitive research program. To apply, submit curriculum vitae, a brief description of research interests, relevant publications, and arrange to have three letters of reference sent by **January 31, 1993**, to: **Chair, Prokaryotic Molecular Biologist Search Committee, MCB Division, Department of Biological Sciences, University of California, Santa Barbara, CA 93106.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS

The Physiology Department of the Dr. William M. Scholl College of Podiatric Medicine (SCPM) invites applications for full-time faculty positions in **PHARMACOLOGY and MICROBIOLOGY**. The positions will be available July 1, 1993, and will offer faculty rank and salary commensurate with professional experience and achievements. Candidates must have a Ph.D. in pharmacology or microbiology, or related areas, and a firm commitment to teaching. The positions involve teaching a comprehensive course in pharmacology or microbiology/immunology to medical students. Research in biomedical science is encouraged. Applicants should send curriculum vitae, salary history, statement of teaching and research interests, and names of three references to: **Dr. John H. Becker, Department of Physiological Sciences, Scholl College of Podiatric Medicine, 1001 North Dearborn, Chicago, IL 60610.** Candidates invited to interview will be asked to submit a teaching portfolio. *SCPM is an Equal Opportunity Employer. We encourage applications from women and minorities.*

POSTDOCTORAL POSITION available to study the molecular mechanisms of immunosuppression by cytomegalovirus (CMV). Objectives include identification of CMV gene products which regulate antigen presentation and accessory cell functions. Background in molecular virology preferred. Send curriculum vitae to: **Ann E. Campbell, Ph.D., Department of Microbiology and Immunology, Eastern Virginia Medical School (EVMS), P.O. Box 1980, Norfolk, VA 23501. Telephone: (804) 446-5667; FAX: (804) 624-2255.** *EVMS is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION

A postdoctoral position is available to study regulation of expression of calcium channels. We are exploring this using molecular, immunological and patch-clamping approaches. Experience in tissue culture and molecular biology is required, and experience in immunohistochemistry is desirable. Send a statement of research interests, curriculum vitae, and three letters of reference to: **James D. Marsh, M.D., Director of Research, Division of Cardiology, Department of Medicine, Wayne State University School of Medicine, 421 East Canfield, 1107 Elliman Research Building, Detroit, MI 48201.** *Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

YORK UNIVERSITY, Toronto, Canada: Plant Molecular Biology. Applications are invited for two **POSTDOCTORAL POSITIONS** to isolate clones of epicuticular wax biosynthesis genes by T-DNA insertion mutagenesis in Arabidopsis. The positions are available immediately with salary and benefits of \$30,000 per year each. Required is demonstrated molecular biology experience (with plant biology experience secondary). Applications with curriculum vitae, reprints of previous publication(s), and the names and addresses of two referees should be sent to: **Dr. B. Lemieux, Department of Biology, Faculty of Pure and Applied Science, York University, North York (Toronto), Ontario, Canada M3J 1P3.**

POSITIONS OPEN

POSTDOCTORAL POSITION IN HIGH-FIELD NMR

A postdoctoral position is available to elucidate the structure of a DNA binding protein involved in Mu DNA transposition. Applicant should have experience in high-field NMR, preferably with proteins. Please send résumé, brief description of research experience, and names of references to: **Dr. Laurence H. Hurley, The Drug Dynamics Institute, College of Pharmacy, The University of Texas at Austin, Austin, TX 78712.**

TWO POSTDOCTORAL POSITIONS—HUMAN MOLECULAR GENETICS. Available January 1, 1993. **Position 1**—Analysis of spontaneous germline and somatic mutation in humans, mice, and other animals. **Recent review:** Steve S. Sommer, "Assessing the underlying pattern of human germline mutations: lessons from the factor IX gene," *FASEB J.* 6:2767, 1992. **Position 2**—Genetic predisposition to schizophrenia using a non-linkage-based approach. **Recent review:** Sobell et al., "Delineation of genetic predisposition to multifactorial disease; a general approach on the threshold of feasibility," *Genomics* 12:1-6, 1992. This position may involve analysis of candidate genes of the dopamine pathway or the development of novel PCR-based methodology to facilitate the analysis (**recent methodology:** Sarkar et al., *Genomics* 13:441, 1992; Sommer et al., *BioTechniques* 12:82, 1992). Applicants should submit curriculum vitae, selected reprints, and names of three references to: **Steve S. Sommer, M.D., Ph.D., Department of Biochemistry and Molecular Biology, Mayo Clinic/Foundation School of Medicine, Rochester, MN 55905.** *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

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

TWO POSTDOCTORAL POSITIONS: Two one-year postdoctoral positions renewable for a second year are available. Beginning date is negotiable. One is in theoretical physical chemistry and the other area is open. Applicants should submit a résumé, transcripts, two letters of reference, an indication of areas of interests, and evidence that all the requirements for a Ph.D. degree will be completed by the starting date to: **David C. Hilderbrand, Head, Department of Chemistry, South Dakota State University, Brookings, SD 57007** by January 1, 1993. *SDSU is an Equal Opportunity/Affirmative Action Employer, F/M. ADA reasonable accommodations. Telephone: (605) 688-4128/(TT/VOICE) (605) 688-4394.*

POSTDOCTORAL POSITION available immediately to study multiple chitin synthase genes in melanized fungal pathogens of humans. Project involves the roles these genes play in site-specific deposition of chitin during Ca^{2+} regulated polarized and nonpolarized development. Candidates must be experienced in molecular biology, including gene expression, PCR, sequencing, and genomic and cDNA cloning. Send curriculum vitae and names of three references to: **Dr. Paul J. Szaniszlo, Department of Microbiology, University of Texas at Austin, TX 78712-1095.**

**STANFORD UNIVERSITY
CENTER FOR MATERIALS RESEARCH (CMR)
RESEARCH ASSOCIATE**

Stanford University is seeking a person with the following qualifications to manage the Chemical Analysis Facilities in the Center for Materials Research, which administers Stanford's National Science Foundation Materials Research Laboratory (NSF-MRL) Program:

Minimum of three years experience beyond Ph.D. degree in a relevant area of science or engineering, such as, but not limited to, chemistry, physics, geology, geophysics, materials science, ceramic engineering, and electrical engineering. Must have an understanding of both surface analytical and electron microprobe equipment and techniques. Expertise in one of these areas is required; expertise in both areas is preferred. Must have knowledge of relevant software and the ability to do programming. Must have excellent interpersonal skills, with the ability to interact successfully with faculty, staff and students. It is required that this person be self-motivated and have excellent organizational skills, as well as a strong commitment to do research, preferably with members of the Stanford community.

It is expected that the manager carry out independent or collaborative research, preferably with the members of the Stanford Community. It is also expected that the manager interact with faculty and users at Stanford, and supervisors of other surface analytical labs to ensure that the Chemical Characterization Facilities at Stanford remain competitive with other U.S. facilities. Training responsibilities, which include teaching one formal graduate level class, as well as service and consultation work, will be required. The manager must be able to analyze samples that are very complex in nature.

This position reports directly to the Technical Director and will be responsible for providing the users of the laboratories with a state-of-the-art chemical characterization facility. Technical support will be provided to assist the manager in providing the level of maintenance, service, training and performance expected of this facility. (EOE/AA) Application deadline is December 18, 1992.

Send cover letter and resume to:

**K. Sands
CMR, McCullough Building 111
Stanford University
Stanford, CA 94305-4045**

WOMEN IN SCIENCE

March 13 Reprint

This first-time special section, reprinted from the March 13 issue of **SCIENCE** takes an in-depth look at women in science.

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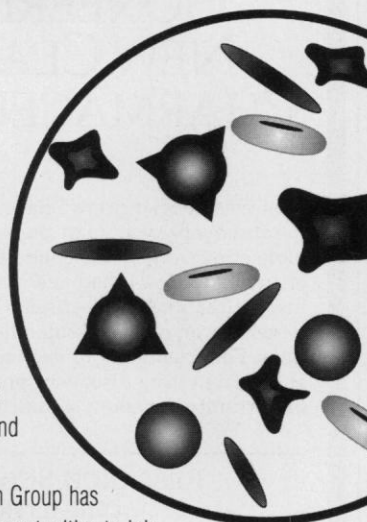
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is an exciting, young biotechnology company focused on developing, manufacturing, and marketing of affinity cell separation devices for use in therapeutic, research, and diagnostic applications.

Expansion of our Research Group has created two outstanding opportunities to join our Seattle-area firm.



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As a member of our research team, the successful candidate will provide scientific leadership to our new T-Cell Therapy Group. This individual will develop new approaches and applications for CellPro's affinity cell separation technologies in the area of T-cell therapy, including: T-cell activation and modification, specific immune selection and T-cell culture. Expertise with T-cell assays, cell culture, and flow cytometry are preferred.

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The successful candidate will be responsible for specific aspects of our stem cell expansion project including: defining the optimal conditions for the growth of hematopoietic progenitor cells, developing new stem cell and progenitor cell assays. A strong background in cell culture, various hematopoietic progenitor cell assays and the use of recombinant growth factors is required.

Both positions will interact with our Device Engineering Group in the development of prototype selection and culture systems, and with our Clinical Group in the design of clinical trials. Candidates with a Ph.D. in Immunology, Hematology, Cell Biology, or a related field and a minimum of 5 years experience in human cellular immunology and/or hematology are encouraged to apply. Excellent communication skills and the ability to work in a collaborative environment are required.

In addition to leading technology and the Pacific Northwest lifestyle, CellPro offers competitive salaries and an excellent benefit plan. For immediate consideration, please send your C.V./resume in confidence to:



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At Gilead Sciences, we have a novel approach to the discovery of human therapeutics through our pioneering work in nucleotide-based technology. We are developing a broad new class of potential pharmaceutical products—disease-fighting drugs that target cancer, cardiovascular disease, and viral infections. For Scientists, our exciting R&D environment and current drug discovery programs represent the opportunity to make a significant contribution.

RESEARCH SCIENTISTS CHEMISTRY

The successful candidates should possess a Ph.D. in organic or medicinal chemistry and 0-5 years of postdoctoral training or industrial experience. This challenging position will require expertise in the design, synthesis, purification and characterization of potential therapeutic agents. Excellent oral and written communication skills and ability to work in a team environment are required.

RESEARCH SCIENTIST DRUG DELIVERY/METABOLISM

In this position, you'll conduct research in the area of drug delivery and metabolism of nucleotide based therapeutics to aid in the selection of drug molecules for development. Responsibilities will include development and application of bioanalytical methods in support of in vitro and in vivo models designed to characterize transport and degradation of novel drug molecules. The candidate should have a Ph.D. in analytical chemistry, biochemistry or a related area and 2-4 years' experience in bioanalytical method development in the pharmaceutical industry. The successful candidate will have a strong background in creative troubleshooting and HPLC method development, and excellent communication skills. Experience in the determination of drugs in biological fluids is essential.

As an emerging force in the pharmaceutical industry, Gilead provides a comprehensive compensation and benefits package, which reflects our leadership and commitment to our science. If you enjoy a team-oriented environment and would like to make an impact in the development of a new class of human therapeutics, please send your CV to: Human Resources, Gilead Sciences, 346 Lakeside Drive, Foster City, CA 94404. An equal opportunity employer.

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Space Biospheres Ventures (SBV) is accepting applications for Biospherian Candidates for a one year Mission in Biosphere 2.

Biosphere 2 is the world's largest closed ecological life system capable of sustaining eight humans with all air, water, waste, and food recycled. Six months of training will be required and about three months debriefing after the Mission.

SBV is especially interested in receiving applications from professionals established in their fields or individuals working on graduate and postgraduate degrees in any of these or related research areas. Experience in field research projects is highly desirable. Applicants need to have both theoretical and practical expertise in at least one of the following areas:

- Ecology/Botany
- Agriculture
- Communications
- Marine Biology
- Medical
- Mechanical/Technical Operations
- Computer/Instrumentation
- Analytics

Please submit your C.V., photo, essay, outline of past and future research interests, plus two recommendations to:



SPACE BIOSPHERES VENTURES

Mission Control • P.O. Box 689 • Oracle, AZ 85623

Implementation Director

Project 2061 is the American Association for the Advancement of Science's (AAAS) comprehensive, long-term initiative to transform science, mathematics, and technology education for the 21st century. Project 2061 is currently seeking a Implementation Director to organize and direct Project 2061 implementation activities.

Responsibilities will include developing and pursuing strategies and plans for Project 2061 implementation, especially the preparation of implementation leaders, building community consensus on the need for proposed reform efforts, and selection and preparation of initial implementation sites; reinforcing relationships and planning and coordinating liaison activities with key organizations such as federal and state agencies; participating with Project 2061 staff in planning other aspects of Project phases; providing advice in areas of expertise and representing the Project to external audiences. **This is a full-time position for an initial period of two years.**

Qualifications: Doctorate in science or science education; 10 to 15 years related work experience (extensive experience in developing and implementing science education innovations and working with high-level education decision-makers); excellent writing ability and interpersonal skills; one to two years supervisory experience; budget experience helpful.

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AAAS
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1333 H St., N.W., Suite #125
Washington, DC 20005

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Neurobiology

We're seeking a Research Associate who is interested in working in the field of neural development and regeneration. The successful candidate will have at least two years of lab experience or equivalent, a BS degree and the ability to interact well with co-workers. Must have skills in animal surgery, animal models for neuronal degenerative diseases, neuroanatomy and general histology. Basic biochemical skills and some tissue culture experience are helpful. Candidate should be meticulous, motivated and eager to learn new things. **Job Code #S-506**

Organic Chemistry

We're seeking a Research Associate who can work independently and has a strong background in modern synthetic methods used in Bioconjugate Chemistry. The successful candidate will have a B.S. or M.S. in Organic Chemistry and 2+ years of laboratory experience. Must also have a broad knowledge of chromatographic and spectral methods. Experience handling proteins desirable. Ability to take initiative and communicate effectively are essential. **Job Code #S-502**

Amgen offers a very competitive compensation and benefits package in addition to a stimulating work environment. If you have the necessary qualifications and would like to be part of an organization that places its highest value on the contributions of its people, send your resume to: **Amgen Inc., Staffing Dept. (Mail Code 10-1-A-411), (indicate Job Code number), Amgen Center, Thousand Oaks, CA 91320-1789.** Amgen is an equal opportunity employer.

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CONSULTING TOXICOLOGIST—MAMMALIAN

Exxon Biomedical Sciences, Inc., has immediate openings for qualified Toxicologists in our chemical and petroleum groups. Ideally, the successful candidates will possess a Ph.D. in Toxicology or an M.S. degree with 3+ years of experience and demonstrated ability to identify, develop, market, and manage the delivery of major human health/product toxicology studies.

The successful candidate will provide extensive consulting assistance to Exxon's worldwide affiliates. The work, as well as the organization, is multidisciplinary, and client interactions are a very important aspect of the work. We are seeking an applications-oriented individual with excellent communications and project management skills.

We offer a competitive salary, attractive benefits, and a chance to join a dynamic organization in a position with opportunities for career growth. Please send resume to Francaen T. Cohen, Human Resources.

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OPPORTUNITY IN NOAA ASSISTANT ADMINISTRATOR FOR SATELLITE AND INFORMATION SERVICES

THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) seeks to fill the position of Assistant Administrator for Satellite and Information Services. This position is to be filled in the **SENIOR EXECUTIVE SERVICE (SALARY RANGE: \$90,000-\$112,100, based on qualifications).**

The incumbent is responsible for NOAA's environmental satellite and information management programs and directs the National Environmental Satellite, Data, and Information Service (NESDIS). NESDIS programs provide satellite as well as retrospective in situ data, information, and services needed to support environmental studies and predictions. NESDIS operates civilian satellite systems that provide observations to atmospheric, oceanic and solar programs. NESDIS also operates three data centers that assemble and distribute environmental data sets required by national environmental programs. NESDIS supports satellite sensor and technology development as appropriate for NOAA's polar and geostationary operational satellite systems.

Candidates must have at least five years experience in or knowledge of operations and information services, and scientific program planning and policy development at a senior level within the satellite and information arena. Interagency and international experience in environmental data policy formulation, environmental data requirements setting and satellite sensor requirements development is also required.

The Department of Commerce Vacancy Announcement number for this position is **NOAA #92-15DS**. The position opens on **18 November 1992** and closes on **12 January 1993**. For further information and to receive the position description, supplemental qualifications questionnaire and other instructions, contact Debbie Scholl or Heidi Smith at the NOAA Personnel Office, (301) 713-0530.

*National Oceanic and Atmospheric Administration
Personnel Division -
QA2/SSMC1/Room 3102
1335 East West Highway
Silver Spring, MD 20910*

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POSITIONS OPEN

POSTDOCTORAL POSITIONS MOLECULAR BIOLOGY

Three positions are available immediately for individuals with strong molecular biology backgrounds. Position (1): molecular characterization of LINE-1 retrotransposons in human cancers (see *PNAS* 87:6990, 1990; *Oncogene* 7:507, 1992). Position (2): characterization of vaccinia virus late gene transcription (see *J. Virol.* 63:4224, 1989; *J. Virol.* 65:3715, 1991). Position (3): relationship between p53 structural alterations and prognosis in breast cancer. Individuals applying for these positions must have experience in DNA cloning, sequencing and the use of eukaryotic expression vectors. Send curriculum vitae and telephone numbers of three references to: T. G. Fanning (Position 1), C. W. Wright (Position 2) or T. J. O'Leary (Position 3) at the: Department of Cellular Pathology, Armed Forces Institute of Pathology, Washington, DC 20306-6000.

POSTDOCTORAL POSITION GENETICS AND MOLECULAR BIOLOGY HARVARD

Available immediately to study intrachromosomal recombination and restriction enzyme mediated recombination (*PNAS* 88:7585, 1991; *Science* 258:402, 1992) in mammalian cells. Molecular biology and cell culture experience required. Please send curriculum vitae to: Dr. Robert H. Schiestl, Department of Molecular and Cellular Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSTDOCTORAL POSITIONS to study: (1) DNA photolyase and the mechanism of enzymic photorepair of DNA damaged by ultraviolet light; (2) Structure/function relationships in bacterial sarcosine oxidase, a multisubunit enzyme using two different flavins and tetrahydrofolate as cofactors. Applicants interested in enzymology, recombinant DNA technology and/or photochemistry are encouraged to send curriculum vitae and names of three references to: Dr. Marilyn Jorns, Department of Biological Chemistry, Hahnemann University School of Medicine, Broad and Vine, Philadelphia, PA 19102.

POSTDOCTORAL POSITION available for studying the mechanisms of plant viral RNA replication. Ph.D. in biochemistry, molecular biology, or related field required; experience with recombinant DNA or protein purification is desirable. Send curriculum vitae and names of three references by December 31, 1992 to: Dr. Theo Dreher, Agricultural Chemistry, Oregon State University, ALS 1007, Corvallis, OR 97331-7301. *OSU is an Affirmative Action/Equal Employment Opportunity Employer and is responsive to dual-career needs. Position #001-1405.*

POSTDOCTORAL POSITION available July 1, 1993 to study the molecular biology of endothelial cells as related to tumor neoangiogenesis. Experience in molecular biology is required. Interested individuals should send curriculum vitae and names of three references to: Dr. Kenneth J. Pienta, Section of Molecular Oncology, The Michigan Cancer Foundation, 110 East Warren, Room 213, Detroit, MI 48201. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN IMMUNOLOGY to study the molecular and cellular biology of Ig hypermutation in germinal centers [*J. Exp. Med.* 173:1165 (1991); *Nature* 354:389 (1991)]. Experience in cellular immunology or molecular biology required. Send curriculum vitae and names of three references to: Dr. G. Kelsoe, Department of Microbiology and Immunology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.

POSTDOCTORAL FELLOW IN RADIO-CHEMISTRY to conduct research in radiochemistry. Synthesis and analysis of various CNS ligands for in vivo and in vitro characteristics of CNS receptors. Job requires a Ph.D. with a strong background in organic synthesis. Interdisciplinary research opportunity in pharmacology, psychiatry, and imaging available. Annual stipend of \$27,000. Send résumé to: Dr. Hank F. Kung, Departments of Radiology and Pharmacology, University of Pennsylvania, Room 305, 3700 Market Street, Philadelphia, PA 19104.

POSITIONS OPEN

ENTOTECH (NOVO NORDISK) FELLOWSHIP IN ENTOMOLOGY OR MICROBIAL INSECTICIDES

The Department of Entomology, University of California (UC) Davis invites applications for a graduate fellowship in entomology to be funded by a gift from Entotech. The Fellowship provides the opportunity of three to five years of funding with first-year funding of up to \$28,000, including out-of-state tuition, fees and salary, and additional years of funding to include fees, salary and a modest research budget. Applicants are encouraged whose areas of research include any aspect of the following: microbial pesticides, microbial insecticides, or insect pathogens. For further information and applications contact:

Department of Entomology
Graduate Advisor
University of California
Davis, CA 95616

Application deadline is January 15, 1993.
UC Davis is an Equal Opportunity Institution.

1992-1995 POSTDOCTORAL FELLOWSHIPS IN PULMONARY BIOLOGY

Postdoctoral fellowships are available in the well established Interdisciplinary University of California, Davis (UCD) Lung Biology Research Program for basic science training in the molecular, cellular, and structural biology of the respiratory system. Research topics include lung epithelial cell biology (differentiation and development), gene transfer to airway epithelium, regulation of airway mucin metabolism, lung xenobiotic metabolism, lung fibrogenesis, inhalation toxicology including oxidant damage to lung tissues, phagocyte physiology and lung injury, and pathophysiology of lung injury and repair mechanisms. Up to three years of funding is available on a competitive basis. Candidates who have an M.D., a D.V.M. or a Ph.D. degree and are U.S. citizens or permanent residents, are eligible to apply.

UCD faculty members include, but are not limited to: Timothy Albertson, Ann Bonham, Alan Buckpitt, Don Carlson, Carroll Cross, Shri Giri, Jerry Green, Barry Halliwell, Dallas Hyde, Jessie Joad, Marc Kaufman, Jerry Last, Paul Luciw, Ruth McDonald, Kent Pinkerton, Charles Plopper, Karen Reiser, Cynthia Robinson, Robert Rucker, Hanspeter Witich, and Reen Wu.

Interested candidates should submit a résumé with three references to: Dr. Carroll Cross, Pulmonary and Critical Care Medicine, 4301 X Street—Room 2120 Professional Building, Sacramento, CA 95817; FAX: (916) 734-7924. *We are especially committed to an aggressive affirmative action plan.*

UNIVERSITY OF CALIFORNIA SAN FRANCISCO

POSTDOCTORAL FELLOWSHIPS IN CANCER BIOLOGY

Several fellowships are available for research on the genetic, molecular, cellular, and developmental aspects of cancer biology. The faculty include: Michael J. Banda (wound repair, proteinases and proteinase inhibitors), James E. Cleaver (human genetic disorders in DNA repair and mouse models), William F. Morgan (role of DNA double strand breaks in recombination, gene amplification and cytogenetic damage), John P. Murnane (DNA recombination, gene mapping), Roger A. Pedersen (early mammalian development, cell lineage, transgenic mice and homologous recombination), Zena Werb (extracellular matrix remodeling and signaling, growth factors and cell cycle in development, repair, targeted gene mutation), and Sheldon Wolff (chromosome damage and repair, radiation cytogenetics, SCE's). Stipends are funded through NIEHS. Appointments can begin immediately. The requirements are a Ph.D. degree or equivalent, preferably in genetics, molecular biology, biochemistry, cell biology or development. *Trainees must be U.S. citizens or permanent residents.* Send résumé, graduate transcript, statement of research interests, and three letters of recommendation by February 1, 1993 to: Dr. Zena Werb, Program Director, Laboratory of Radiobiology and Environmental Health, University of California, San Francisco, CA 94143-0750. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

MEMORIAL SLOAN-KETTERING CANCER CENTER

SPECIAL FELLOWSHIP IN MEDICAL ONCOLOGY/HEMATOLOGY

The Department of Medicine at Memorial Sloan-Kettering Cancer Center is offering Special Fellowship training positions in medical oncology for physician scientists committed to an academic research career which is based in laboratory investigation. The fellowship positions will focus upon intensive training in laboratory investigation, and, if desired, will also provide the level of additional clinical experience required for Board certification in medical oncology (and/or hematology). Successful candidates will have the opportunity to select from a large number of outstanding research laboratories in the Sloan-Kettering Institute and the Department of Medicine at the Center. The faculty includes investigators in areas with potential or direct application to the diagnosis and therapy of cancer, including genetics and genetic engineering, molecular biology, structural biology, growth regulation and signal transduction, oncogenesis, immunology and immunotherapy, and molecular pharmacology.

Interested individuals should apply to: John Mendelsohn, M.D., Chairman, Department of Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Telephone: 212-639-5878. *Applications from minorities are encouraged.* Please enclose a copy of your curriculum vitae, a brief statement of your research interests, and the names of three individuals who can evaluate your potential for a successful career in laboratory investigation.

POSTDOCTORAL FELLOWSHIP TOXICOLOGY

MARINE AND FRESHWATER BIOMEDICAL SCIENCES CENTER UNIVERSITY OF MIAMI KEY BISCAYNE, FLORIDA

Toxicologist sought with expertise in neurotoxicology. A Ph.D. or board certification in Toxicology is a must. Center interests include marine natural products neurotoxicology, xenobiotic metabolism, and novel marine biomedical models. Duties commensurate with qualifications. Available immediately. Send curriculum vitae and names and telephone numbers of three references to: NIEHS Marine and Freshwater Biomedical Sciences Center, University of Miami, RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149, ATTN: Search Committee. Position will remain open until filled. *The University of Miami is an Equal Opportunity/Affirmative Action Employer and smoke/drugfree workplace. We do not discriminate on the basis of race, religion, color, sex, age, national origin or disability. We encourage applications from females, veterans, disabled and minority group applicants.*

POSTDOCTORAL RESEARCH POSITIONS

available in the Laboratory of Radiobiology and Experimental Carcinogenesis at the Harvard University School of Public Health. Participation in a multidisciplinary approach to the investigation of the induction of genetic damage in humans by chemical and physical agents. Involves both *in vivo* and *in vitro* studies of the molecular nature of mutation in human cells induced at both hemizygous and heterozygous gene loci. Please forward a letter of inquiry, curriculum vitae, and the names of three references to: Dr. Howard Liber or Dr. Karl Kelsey, Laboratory of Radiobiology and Experimental Carcinogenesis, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115. *Due to federal government requirements, this position is limited to U.S. citizens or permanent residents. Applications from minority and women candidates are particularly encouraged.*

NEW ENGLAND AQUARIUM invites applications for an **ASSOCIATE SCIENTIST** in the Physiological Biology of Fishes with emphasis in Conservation Ecology. The candidate is expected to initiate a comparative research program in New England with possible comparison to tropical elements. The candidate should hold a Ph.D. and have at least three years of postdoctoral experience in both field and laboratory experimentation. A proven track record in grant funding is also necessary. Send curriculum vitae, research interests, and three references to: Human Resources Manager, New England Aquarium, Central Wharf, Boston, MA 02110. No telephone calls please. Response to selected candidates only. *Equal Opportunity Employer.*

Carolina Conference on INTEGRINS AND CELL SIGNALING

To be held April 30–May 2, 1993
at the University of North Carolina at Chapel Hill

Topics will cover the mechanisms of integrin regulation, signaling by integrins, control of growth and differentiation by extracellular matrix, integrin-mediated gene transcription, integrins and cancer, and integrin structure and function. Among the speakers will be: A. Arnaout, J. Brugge, C. Buck, K. Burridge, D. Cheresh, C. Damsky, S. Dedhar, M. Ginsberg, S. Haskill, A. Horwitz, R. Juliano, M. Karin, A. O'Rourke, L. Parise, T. Parsons, D. Phillips, E. Plow, E. Ruoslahti, M. Schwartz, S. Shattil, S. Shaw, G. White, S. Wright, and K. Yamada, J. Bennett. A poster session is scheduled and submission of abstracts is encouraged.

The cost of registration and meals is \$220 (does not include lodging). Please apply by **February 1** by writing a brief letter describing your research interests and their relevance to this meeting. For further information contact Jo Ann McPherson, The Program in Molecular Biology & Biotechnology, CB# 7100-S, 130 MBBRL, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599–7100. Ph. # (919) 966-6800 or Fax (919) 966-6821.

Co-sponsored by the North Carolina Biotechnology Center, the Program in Molecular Biology & Biotechnology, the Society for Leukocyte Biology, Hoechst-Roussel Pharmaceuticals, the UNC-CH Center for Thrombosis and Hemostasis, and the Department of Pharmacology, UNC-CH.

POSTDOCTORAL POSITION BIOCHEMISTRY OF DIFFERENTIATION

A postdoctoral position is available immediately to join a group investigating the role of retinoid metabolism during keratinocyte differentiation. The laboratory has recently reported the status of retinoid metabolites in differentiated keratinocytes. We will now focus on the access of these metabolites, the regulation of their synthesis, and their role in keratinocyte maturation. Techniques presently utilized include HPLC analysis and immunohistochemistry. As the project proceeds techniques of molecular biology and protein biochemistry will be employed. The successful candidate should possess a background in biochemical or molecular biologic studies involving regulatory or signal transduction pathways, and an interest in epithelial cell biology. Interested candidates should send a letter describing current and past research training, and the names of 3 references to:

Dr. Marcia Simon, Living Skin Bank, Department of Oral Biology and Pathology, School of Dental Medicine, SUNY at Stony Brook, Stony Brook, NY 11794-8702

The University at Stony Brook is an affirmative action/equal opportunity educator and employer.



WORLD AIDS FOUNDATION

The World AIDS Foundation (WAF) announces its intent to support research and education relating to AIDS in the developing world. The goal of the WAF is to facilitate information exchange and to assist developing countries to respond to the AIDS pandemic.

The Foundation is particularly interested in projects that are catalytic, and once in place could have a multiplicative effect. The WAF also is particularly interested in supporting applications that originate from developing countries and which emphasize collaboration between and among scientists from developed and developing countries. The main area of interest of the WAF is education for health professionals in developing countries especially in-country training. This includes highly focused workshops which enhance the scientific process and transfer knowledge needed in the effort against HIV infection and AIDS.

The limit of any single funding request to the Foundation is \$200,000.

Application Procedures:

Concept letter and applications may be prepared in either English or French. Applicants should submit concept letters for initial consideration. Following review of concept letters, applicants may be invited to submit complete proposals. The annual deadline for receipt of concept letters is February 1.

Concept letters and inquiries concerning the programs of the World AIDS Foundation should be directed by mail or by fax to either:

**World AIDS Foundation
Assistant Secretary for Health
c/o Director, Fogarty International Center
National Institutes of Health
Building 31, Room B2C02
9000 Rockville Pike
Bethesda, Maryland 20892 U.S.A.
Fax: (301) 402-2056**

or

**Fondation Mondiale SIDA
c/o Directeur de l'Institut Pasteur
28 rue du Docteur Roux
75724 Paris, Cedex 15 FRANCE
Fax: 0033-1-45688938**



NIH is an Equal Opportunity Employer.

POSITIONS OPEN

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS

JILA [operated jointly by the National Institute of Standards and Technology (formerly NBS) and the University of Colorado] is devoted to research, study and teaching in atomic and molecular physics, chemical physics, laser physics, astrophysics, precision measurement, gravitational physics, geophysical measurement, and related areas. Applications are invited for the E.U. Condon POSTDOCTORAL FELLOWSHIP in Theoretical Atomic, Molecular and Optical Physics. This position will permit the incumbent to pursue an independent course of self-directed research, with the possibility of extensive interaction with existing theoretical and experimental groups. The appointment will be made starting in the fall of 1993 for a year, normally renewable for a second. The E.U. Condon Fellowship is funded by the National Science Foundation, and will carry a salary of \$33,000. Applications, including curriculum vitae, brief summary of research interests, and three letters of recommendation, must be received by March 1, 1993.

Further information can be obtained from: **Secretary, Visiting Scientists Program, JILA, University of Colorado, Boulder, CO 80309-0440, USA.**

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

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE 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.**

RESEARCH ASSOCIATE

We seek an individual with a Ph.D. or M.D. degree for participation in research on eicosanoids and other vasoactive hormonal systems. Experience in lipid biochemistry, cell biology or molecular biology desirable. Send curriculum vitae and three letters of reference to: **Dr. Alberto Nasjletti, Department of Pharmacology, New York Medical College, Valhalla, NY 10595.** *NYMC is an Equal Opportunity/Affirmative Action Employer.*

NATIONAL RESEARCH COUNCIL ASSOCIATESHIPS. Applications are being accepted by the National Research Council (NRC) from scientists interested in conducting space medical research at the **NASA/Johnson Space Center.** Associateship award will be offered in the field of clinical pharmacokinetics, pharmacodynamics, biopharmaceutics, and physiological modeling. If you have an interest in developing innovative research methods for the U.S. Space Program, and have a Ph.D. in pharmacetics or related biomedical field with graduate training in any of the above research areas, this Associateship can offer the challenge and excitement of an innovative research environment and an excellent opportunity to play an important role in the space medical program. Interested applicants should also have experience in HPLC/LC-MS analyses and pharmacokinetic data analysis and familiarity with statistical and mathematical methods of data evaluation.

NRC Research Associateship awards are granted on a competitive basis. Applications must be submitted directly to the NRC by: January 15, April 15 and August 15 for reviews in February, June and October respectively. For further information and application materials, contact: **Dr. Stanley Goldstein, Director of University Programs, Mail Code: AHU, NASA Johnson Space Center, Houston, TX 77058, FAX: 713/483-2543.**

HORTICULTURAL TAXONOMIST

Applicants with a broad background in plant systematics are invited for the position of taxonomist to engage in taxonomic revisions of horticultural taxa. Experience with cultivated plants preferred. Ph.D. required with a knowledge of nomenclature and competent database skills. Apply by sending curriculum vitae, a letter with statement of research interests and goals, and names and addresses of three referees to: **Ms. R. Cabiness, Personnel Director, Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, NY 11225-1099.** Review of applications begins 2 January 1993.

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE Lake Forest College

Position available June 1, 1993 to study molecular biology of ion transport in crustacean gill, particularly the electrogenic Na⁺/H⁺ antiporter. Summer months at Mount Desert Island Biological Laboratory, Salsbury Cove, Maine. Send curriculum vitae and names of three references by February 1, 1993 to: **Dr. David Towle, Department of Biology, Lake Forest College, Lake Forest, IL 60045.** *An Equal Opportunity Institution.*

STAFF SCIENTISTS (2) DEPARTMENT OF GENETICS

Two Staff Scientist positions are available for research on (1) protein and DNA polymorphisms in chimpanzees for use in paternity verification and colony management planning; and (2) the identification of genes affecting blood pressure regulation in baboons. The projects will involve protein electrophoresis (all media), isoelectric focusing, DNA cloning, sequencing, and amplification (PCR), nucleic acid electrophoretic methods, Southern blotting, and related methodologies. Applicants for these positions must hold a doctoral-level degree in genetics or a closely related field. For position 1 (chimpanzee) applicants must have a minimum of five years of postdoctoral experience using biochemical and molecular approaches for the analysis of genetic polymorphisms, at least two years of which must be in mammalian biochemical genetic (isozyme) analysis and gene mapping via somatic cell hybrid panels and recombination approaches. Applicants for position 2 (baboon) must have a minimum of five years of postdoctoral experience that includes molecular cloning, DNA sequencing, and RNA/cDNA and immunochemical/biochemical analysis of tissue-specific gene expression in mammalian (especially primate) systems. Candidates should send curriculum vitae and the names and addresses of three references to: **Personnel Director-# (indicate position #1 or #2), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147.** Applications must be postmarked no later than December 23, 1992. *An Equal Opportunity Employer, M/F.*

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.*

CLINICAL NEUROPHYSIOLOGIST with previous experience in biologic signal processing to assist in intra-operative monitoring program. The candidate should have prior experience with the analysis of evoked potential and/or EEG data but need not have prior experience with intra-operative neurophysiology. The candidate's primary responsibilities will be to assist in the supervision of technologists carrying out intra-operative neurophysiologic studies, provide real time interpretations of the data obtained in these studies and assist with the management of the computing facilities required to maintain the intra-operative neurophysiology network. Interested candidates should send curriculum vitae to: **Dr. Mark M. Stecker, Department of Neurology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104, or call (215) 662-2650.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

EVOLUTIONARY BIOLOGIST

The Department of Biology, University of North Carolina at Chapel Hill seeks an outstanding biologist studying evolutionary mechanisms. The appointment to enhance our programs in ecology, behavior, evolution and systematics can be made at any level. Appointment will be available July 1, 1993. Outstanding scientists with at least two years of postdoctoral experience should send curriculum vitae, a description of research interests, selected publications, and four letters of recommendation to: **Evolutionary Biology Search, Department of Biology, University of North Carolina, Chapel Hill, NC 27599-3280.** Priority will be given to applications received by January 8, 1993. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

CLINICAL RESEARCH ASSOCIATES

Suburban pharmaceutical company north of Chicago is recruiting experienced Clinical Research Associates and Senior Clinical Research Associates for a rapidly expanding Research & Development group.

Previous experience in the pharmaceutical industry with new drug development should include clinical study design, study placement, monitoring and summarization of clinical studies for NDA submission.

Send résumés:

**GenDerm Corporation
Human Resources
600 Knightsbridge Parkway
Lincolnshire, IL 60069**

PRINCIPAL BIOMEDICAL ENGINEER. R&D firm, northeastern Ohio. Responsibilities include development and fabrication of electronics for functional electrical stimulation (FES) systems; design of implantable devices involving a radio frequency (RF) receiver and electronics to provide electrical stimulation, along with external control units (ECUs) to control the electronics of the implant through the RF interface. Selection of components to minimize weight, power and volume for human body-implantable devices. Design of semi-custom-integrated circuits using complementary metal oxide semiconductors (CMOS) technology combining analog and digital functions for hybrid circuits smaller than conventional approaches. Design of novel receiver/connector. Ph.D. in biomedical engineering with biomedical major field of study plus 4 years of experience as research and/or project biomedical engineer. Hours: Monday to Friday, 7:30 a.m. to 4:30 p.m., overtime as needed; \$5,500 per month. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO #1200936, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

SENIOR ORGANIC CHEMIST—UCSB: The Department of Chemistry of the University of California, Santa Barbara, is initiating a search for a senior organic chemist. The timing of this appointment is planned to correspond to the scheduled 1994 completion of a 61,430 ASF addition to the Chemistry Building. Only those individuals with an outstanding record in research and teaching will be considered. The specific sub-field is open and applications will be accepted until this position is filled. Persons interested in applying or obtaining further information are urged to write to: **Chair, Organic Search Committee, Department of Chemistry, University of California, Santa Barbara, CA 93106-9510.** *An Equal Opportunity/Affirmative Action Employer.*

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.*

**DIRECTOR
CENTER FOR RADIOACTIVE
WASTE MANAGEMENT
THE UNIVERSITY OF NEW MEXICO**

The University of New Mexico College of Engineering is seeking a Director of the Center for Radioactive Waste Management. The Center, which is now being formally organized, has over twenty faculty from across the university conducting research programs in various topics in radioactive waste management, with annual funding of over \$2 million. UNM has degree and certificate programs with emphases in radioactive waste issues and an extensive series of non-credit videoconferences and short courses. The Director will assume a significant role in the New Mexico Waste-Management Education and Research Consortium (WEREC), a consortium of New Mexico State University, New Mexico Institute of Mining and Technology, The University of New Mexico, Navajo Community College, Sandia National Laboratories and Los Alamos National Laboratory, which is funded primarily by the U.S. Department of Energy.

Candidates for Director should have an international reputation in radioactive waste management, managerial skills in an interdisciplinary setting, ability to generate and supervise externally funded research, and ability to work effectively with both the technical community and non-technical public.

Candidates must have a doctorate in engineering or science and be qualified for the position of tenured professor in one of the departments of the College of Engineering. Joint appointment with another department in the University may also be considered.

Interested persons should send a complete resume and a list of four references to:

**Dr. David Kauffman, Associate Dean
College of Engineering
The University of New Mexico
Albuquerque, NM 87131**

Applications must be received by January 29, 1993, for primary consideration. Salary will be commensurate with qualifications and experience.

The University of New Mexico is an equal opportunity/affirmative action employer.

STAFF SCIENTIST PURIFICATION DEVELOPMENT

Delivering on the Promise of Biotechnology...

Immunex Corporation, a leading biopharmaceutical company focused on the discovery, development, manufacture and marketing of products to treat cancer and autoimmune disease, is seeking a qualified candidate to join our Purification Development group. ■ The successful candidate will be develop purification processes for the clinical production of recombinant proteins. Projects will include designing and directing experiments utilizing conventional and novel purification methods that will allow scale up and implementation of purification process into clinical manufacturing. ■ Scientists with a Ph.D. in chemistry, biology or chemical engineering and experience with protein purification and protein characterization are encouraged to apply. Extensive experience with various chromatography processes is desired as well as familiarity with membrane filtration and systems. ■ Immunex Corporation offers a fast paced, stimulating environment and a competitive compensation package. For consideration, please submit C.V., names of three references and a list of publications to the following address and specify job #7215347: **IMMUNEX CORPORATION, Attn.: Human Resources Dept., 51 University St., Seattle, WA 98101. Fax: (206) 623-4572.** Equal Opportunity Employer.

IMMUNEX

In 130 Countries, Abbott Research Makes A Difference.

Since 1888, Abbott Laboratories has been improving the quality of human life through the development of advanced health care products marketed in over 130 countries. Today, you could join us and benefit from our tremendous commitment to R&D and Fortune 100 resources.

STUDY DIRECTOR ~ GLP Toxicology

We now seek a top professional to oversee in-house toxicology and contract laboratory studies. Responsibilities include protocol development, study monitoring, and report preparation. You will also conduct literature evaluations and interact with drug discovery, drug metabolism, and other drug development personnel. We require a PhD in Pharmacology/Toxicology and 1-2+ years of pharmaceutical and/or post-doctoral toxicology experience.

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For confidential consideration, please send a resume with salary history to: **Patricia Handy, Corporate Staffing, Job# 37379, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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PHARMACEUTICAL DISCOVERY

Corvas International, Inc., an emerging biopharmaceutical company based in La Jolla, California, is expanding to address product opportunities for the treatment of thrombosis and vascular disease. Our focus is the development of pharmaceuticals targeted at enzymes and receptors involved in the processes of thrombosis and inflammation. To approach these important therapeutic targets, we have assembled a highly talented multidisciplinary team. The team is growing and we have a number of exciting career opportunities for Bachelor- through PhD-level professionals in the following areas:



Analytical Chemistry (Job Code 9232)

Medicinal Chemistry (Job Code 9233)

In Vivo Cardiovascular Pharmacology (Job Code 9236)

Molecular Biology (Job Code 9238a)

Biochemistry (Job Code 9238b)

Cell Biology (Job Code 9238c)



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

CORVAS
INTERNATIONAL

IRRI

INTERNATIONAL RICE RESEARCH INSTITUTE

POSITION ANNOUNCEMENT AGRONOMIST/PROGRAM LEADER of the UPLAND RICE ECOSYSTEM RESEARCH PROGRAM

IRRI is one of 18 international centers supported by the Consultative Group on International Agricultural Research (CGIAR). Its basic goal is to improve the well being of rice growers and consumers worldwide. Institute scientists work in an interdisciplinary, creative and scientifically modern environment and in collaboration with colleagues and scientists in National Agricultural Research Systems (NARS). The Institute located in Los Baños, Philippines, about 70 km south of Manila provides a supportive, multi-cultural living environment for families and children.

The Upland Rice Ecosystem Research Program, one of 5 IRRI research programs, conducts research to help rehabilitate and increase the stability and sustainability of upland rice systems. The program helps strengthen the research capability of NARS through research collaboration and training thereby improving the livelihood of poor farmers, many of whom are women.

Responsibilities

- Lead research on nutrient cycling processes, with the objective of maintaining or enhancing soil fertility to increase productivity, stability and sustainability of upland systems.
- Collaborate with weed scientists and crop physiologists to develop a quantitative understanding of the interactions among soil fertility management, nutrient cycling, weed competition/succession and water use efficiency of upland systems.
- Provide visionary leadership in developing a program of research for the upland rice ecosystems and provide participatory team leadership for program members.
- Prioritize, monitor, review and evaluate research project progress and resource requirements; take corrective action when necessary.
- Coordinate program reporting through annual reports, reviews and other mechanisms including presentation to IRRI's Board Program Committee

Qualifications

- Ph.D. in agronomy, soil science or agroecology, with a proven record of scientific contribution.
 - At least 10 years post PhD research experience.
 - Demonstrated management skills, including the ability to function in participatory, multi-disciplinary and multi-cultural environment.
 - Experience with rice and acid infertile soils in the tropics is desirable.
- IRRI provides a gender sensitive work environment and particularly welcomes women applicants.

Benefits

Salary and prerequisites are competitive with those of similar international organizations. These include support for education, car, housing and favorable annual leave, medical and retirement benefits. The appointee will be assigned at IRRI headquarters in Los Baños and should be prepared to travel to rice growing countries in Asia.

Applications

Send applications with full documentations, including CV and names of 3 referees (with telephone and fax numbers, if possible) to:

Dr. Klaus J. Lampe, Director General
IRRI, P.O. Box 933, 1099 Manila, Philippines
Tel: 632-8181926 FAX: 632-8182087, 8178470
Tlx: 40890 RICE PM or 22456 IRRI PH

Applications are due on or before February 28, 1993, or until a suitable candidate has been identified.

DIRECTOR OF THE CENTER FOR BASIC AND APPLIED MEDICAL RESEARCH LOVELACE MEDICAL FOUNDATION

Lovelace Medical Foundation, Albuquerque, New Mexico is seeking a Director of the Center of Basic and Applied Medical Research (CBAMR). Under the direction of the CEO, the Director is responsible for planning, staffing, operating, monitoring and control of CBAMR which will promote the Foundation's mission of the creation, application, and dissemination of knowledge for the improvement of human health. The Director will devote sixty percent of his/her time to personal research and forty percent to management activities.

Successful candidates must possess a doctoral level degree in medicine or science; credentialing, certification, and licensure appropriate to the individual's professional field; a senior level scientist with at least seven years of experience in biomedical research; a background of research interests relating to environmental health; evidence of professional recognition and accomplishment; experience in managing research scientists, programs and operations; excellent oral and written communication skills; a thorough understanding of research funding and the ability to lead and supervise an accomplished technical/professional staff.

Resumes will be accepted until February 15, 1993. Qualified candidates should send letter of interest, curriculum vitae and names and telephone numbers of three references to Judy Coalson, Manager of Human Resources, Lovelace Medical Foundation, 2441 Ridgecrest Dr. SE, Albuquerque, New Mexico, 87108, 505/262-7938.

*Affirmative Action/Equal Opportunity/
ADA Employer*

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

Field Services Coordinator

Project 2061 is the American Association for the Advancement of Science's (AAAS) comprehensive, long-term initiative to transform science, mathematics, and technology education for the 21st century. Project 2061 is currently seeking a Field Services Coordinator to work with cooperating school districts and other similar groups.

Responsibilities will include developing and implementing an operational plan to guide Project 2061's continued interaction with six cooperating teams of educators and other similar groups; coordinating activities of the Project 2061 office and the six teams; coordinating communications and serving as primary liaison between Project 2061 staff and the leaders of the six teams; managing the development of formal agreements with teams and other groups and monitoring progress; managing collection, analysis, and synthesis of information from teams and other groups in preparation for development of a publication on implementation of Project 2061 reforms; participating with other staff in planning Project 2061 activities and representing the Project to external audiences. **This is a full-time position for an initial period of two years.**

Qualifications: Master's degree (science education or related field); five to ten years related work experience (K-12 teaching, curriculum development, and teacher supervision in science related field); experience in state-level advisory groups or task forces; successful experience with curriculum-based reform at state and local education levels; excellent writing, verbal, and interpersonal skills.

AAAS offers a competitive salary and excellent benefits, a professional environment, and pleasant surroundings convenient to Metro. Please submit cover letter, resume & salary requirement to:

AAAS
Human Resources Department
1333 H St., N.W., Suite #125
Washington, DC 20005

AAAS is an Equal Opportunity Employer and has a non-smoking work environment.



Postdoctoral Research Fellows

Ortho Diagnostic Systems Inc., a Johnson & Johnson company, is committed to ensuring the safety of the world's blood supply by providing products for early, accurate, fast and simple medical diagnosis. As we look toward the future, we seek research professionals to carry on the pioneering spirit that has brought us to the forefront of the study of blood diagnostics. Exceptional opportunities exist for recent or experienced (2+ years) Postdoctoral Fellows to work with world class Scientists in the following areas:

△ IMMUNOLOGY R&D

- **Ph.D in Hematology** and knowledge of hematopoietic progenitors and means of identifying required. Background in biochemistry, molecular biology and flow cytometry preferred.
- **Ph.D in Cellular Immunology** and familiarity with production and maintenance of human T-cell clones required. Background in biochemistry, molecular biology and flow cytometry preferred.

△ HEMOSTASIS AND TECHNOLOGY R&D

- **Ph.D in Biochemistry/Chemistry** or a related field required. Background in Platelet Biology, Mechanism of Cellular Receptor Function, Antibody Development and Fibrinolysis preferred.
- **Ph.D in Biochemistry/Chemistry** or a related field required. Background in Enzyme Kinetics, Fluorescence/Chemiluminescence and Protein Chemistry preferred.

△ HIV AND HEPATITIS R&D

- **Ph.D in Immunology, Virology, Parasitology** or a related field and experience in developing infectious disease immunoassays and PCR technology for detection of infectious agents required. A significant publication record in peer reviewed journals and previous postdoctoral training a plus.

We offer a team-oriented, smoke-free work environment, competitive salary and full package of Johnson & Johnson benefits, which includes a dental plan, tuition reimbursement and our on-site total health facility, the LIVE FOR LIFE Wellness Center. For immediate consideration, please forward your resume and salary history, indicating position of interest, to: Human Resources, Dept.

CP, Ortho Diagnostic Systems Inc., 1001 US Hwy 202, P.O. Box 350, Raritan, NJ 08869-0606. We are an Affirmative Action/Equal Opportunity Employer M/F/D/V.

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**The Hong Kong
University of Science
and Technology**

Department of Biology

The Department of Biology invites applications for several faculty positions beginning July, 1993. Appointments will be made at the levels of Lecturers, Senior Lecturers, Readers and Professors. Research areas of particular interest include, but are not restricted to, molecular genetics/cytogenetics, plant molecular biology and biochemistry, environmental biology, developmental biology, neurobiology and microbiology. Clear evidence of research excellence and teaching potential is essential. Review of applications will commence after January 1, 1993 and positions will remain open until filled.

Hong Kong University of Science and Technology is a publicly-funded research university established in April 1988. The Department of Biology is well equipped and has post-graduate programme to offer M.Phil. and Ph.D. degrees. Salary range for these positions is from US\$44,100 p.a. (Lecturer minimum) to US\$97,700 p.a. (Professor minimum). Generous fringe benefits including medical and dental benefits, annual leave and children's education allowances are provided. Air passages and housing are also provided where applicable. Initial appointments will generally be on a three-year contract; a gratuity of 25% of the total basic salary drawn will be payable upon successful completion of contracts.

Applications/nominations should be sent with c.v. and the names of 3 referees to: Prof. Madeline Wu, Acting Head, Department of Biology, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, FAX No.: (852) 358 1559



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Leadership in Natural Products Research

The **Research Triangle Institute** is noted for over 30 years of contributions to **Natural Products Research**. Now we are seeking an individual to build on this tradition and lead our research into the 21st century.

The successful candidate will be a leader in defining the direction of future natural products research at RTI and will be expected to write successful grant and/or contract proposals, manage research projects, and supervise laboratory staff. *Salary and title will be commensurate with experience.*

Excellent scientific credentials are required. Areas of demonstrated competence should include natural products chemistry, publication (significant publication record in peer-reviewed journals), ability to obtain funding for research in natural products, communications (oral and written), and collaborative/personal relationship skills.

The **Research Triangle Institute** offers a scientifically stimulating environment in a multidisciplinary research organization. Ongoing programs in organic, bioorganic and medicinal chemistry, life sciences and toxicology offer opportunities for collaborative research. The **Research Triangle Park** is noted for both its science and its quality of life.

Please address applications to **Natural Products Search Committee, Research Triangle Institute, PO Box 12194, RTP, NC 27709**. Include your CV, a statement of your research and career goals, and the names of 3 references.

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Research Triangle Institute

MEETINGS

PHARMACEUTICAL DESIGN USING EPITOPE SELECTION TECHNOLOGIES

February 1-2, 1993; Hyatt Ricketts, Palo Alto, CA.
SPEAKERS: G. Smith, M. Geysen, R. Balint, R. Houghten, J. Wells, R. Hoess, K. Lam, R. Ladner, M. Kahn, W. Dower, J. Winter, C. Craik, L. Loeb, A. Ellington, L. Griffin, J. Szostak, S. Fodor, C. Tuerk, J. Blaney, C. Barbas, F. Cohen, D. Burton, B. McDowell, J. Marks. **Organizers:** James Larrick; Robert Balint. **Abstracts due:** January 15, 1993. **Sponsor:** Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043; FAX: 415-903-9645; Telephone: 415-694-4996.

ANNOUNCEMENTS

VISITING AFRICAN-AMERICAN SCHOLARS PROGRAM BUTLER UNIVERSITY

Butler University seeks outstanding African-American scholars (rank open) to participate in a visiting scholars program co-funded by Lilly Endowment, Inc. Positions available for Fall 1993 and Spring 1994 are for one semester and involve a strong commitment to interaction with faculty, students and the community; an opportunity to pursue research interests; and a minimal teaching load. Field of expertise is open. Butler University offers degree programs in natural sciences, social sciences, humanities, music, dance, theater, radio/TV, pharmacy, education and business administration.

Butler is a selective university in an exciting period of growth and is committed to increasing its African-American student body and faculty. Enrollment is 2600 full-time undergraduate and 2000 part-time graduate and undergraduate students. The wooded 300-acre campus is located in a residential area near downtown Indianapolis.

Send nominations or letter of interest, curriculum vitae, and the names of two references by February 1, 1993, to: **Dr. Kenneth Colburn, Visiting African-American Scholars Program, Butler University, 4600 Sunset Avenue, Indianapolis, IN 46208.** For more information call (317) 283-9974.

Butler University is an Equal Opportunity/Affirmative Action Employer.

University of California, San Francisco Announces the Formation of a New Graduate Program BIOMEDICAL SCIENCES

We believe that the next frontier in modern biology is the investigation of normal and pathological function in vertebrates using a combined molecular and integrative approach. To train investigators for research on cells, tissues, and organ systems using molecular, cellular and whole animal techniques, we have formed a new program for doctoral training in Biomedical Sciences. The program will emphasize an integrated approach to vertebrate biology and the importance of disease in biological research. A faculty of over sixty members, drawn from basic science and clinical departments, represents a broad range of research interests. Students entering the program will take a specially designed curriculum of courses combined with laboratory rotations, and will then enter a laboratory for research training. We invite applications from qualified students, especially women and minorities. Further information about the program can be obtained from: **Dr. Zach Hall, Head, or Dr. Steinunn Baekkeskov, Chair of Admissions.** For application forms, please contact: **Pamela Humphrey, Program Coordinator, Box 0444, University of California, San Francisco, CA 94143.**

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ANNOUNCEMENTS



REQUEST FOR PROPOSALS MOLECULAR GENETIC STUDIES INHERITED RETINAL DEGENERATIONS

Proposals are invited for molecular genetic analysis of inherited retinal degenerations such as retinitis pigmentosa and allied disorders, Usher syndrome, and inherited macular degeneration. Proposals must focus on mapping, isolation, and characterization of genes causing a form(s) of retinal degeneration. Proposals to define and/or correct gene defects in animal models, including transgenics, are also invited.

New and renewal applications will be reviewed by a special panel of consultants to the RP Foundation Scientific Advisory Board, solely on the basis of scientific merit and direct relevance. Awards will average \$100,000 annually for three years.

Interested individuals should submit a letter of intent which briefly summarizes the proposed research approach, describes background of the laboratory, and gives an approximate budget and curricula vitae of the principal investigators. Following a preliminary review, complete applications will be invited from a limited number of applicants. Deadline for letter of intent is January 22, 1993, for application is April 1, 1993, and funding is expected to begin September 1, 1993.

Address letters of intent to: **Jeanette S. Felix, Ph.D., Director of Science, RP Foundation Fighting Blindness, 1401 Mt. Royal Avenue, Baltimore, MD 21217. Telephone: 410-225-9400; FAX: 410-225-3936.**

COURSES AND TRAINING

GRADUATE TRAINING IN VIRAL ONCOLOGY AND IMMUNOLOGY

Stipends are available for students pursuing a Ph.D. in molecular oncology or immunology beginning September 1993. The principal interests of participating faculty are viral and cellular oncogenes, growth control, and molecular, cellular, and tumor immunology.

Students will be supported chiefly by an NIH programmatic training grant, requiring U.S. citizenship, or resident status. We strongly encourage applications from minority students. Limited funding is also available outside of this source. Information and applications forms are available from: **Dr. R.B. Carroll, Graduate Student Advisor, Department of Pathology, New York University Medical School, 550 First Avenue, New York, NY 10016.**

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SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY

January 11-15, 1993; Baltimore, Maryland
**Center for Fluorescence Spectroscopy
University of Maryland School of Medicine**

Topics include: time- and frequency-domain methods, instrumentation, data analysis, anisotropy, quenching, lifetime-based sensing, fiber optics, fluorescence lifetime imaging. For outline/registration form, contact: **Susan Rhinehart (coordinator) or Prof. J. R. Lakowicz, Department of Biological Chemistry, University of Maryland School of Medicine, 108 North Greene Street, Baltimore, MD 21201; Telephone: 410-706-8409; FAX: 410-706-8408.**

NASA PLANETARY BIOLOGY INTERNSHIPS.

The Marine Biological Laboratory, Woods Hole, Massachusetts, invites applications from graduate students and seniors accepted to graduate programs for awards of \$2200 plus travel to participate in research at NASA centers and collaborating institutions for approximately 8 weeks. Typical intern programs include: global ecology, remote sensing, microbial ecology, biomineralization, and origin and early evolution of life. Application deadline: 1 March 1993. For information/applications, contact: **Lorraine Olendzenski, Planetary Biology Internship, Department of Biology, University of Massachusetts, Amherst, MA 01003. email: PBI@botany.umass.edu. An Equal Opportunity/Affirmative Action Institution.**

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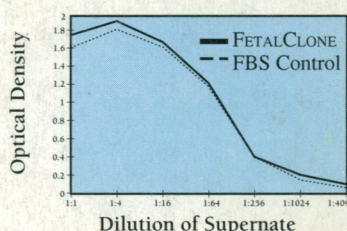
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OPTIMIZED FOR HYBRIDOMA & RELATED CELLS

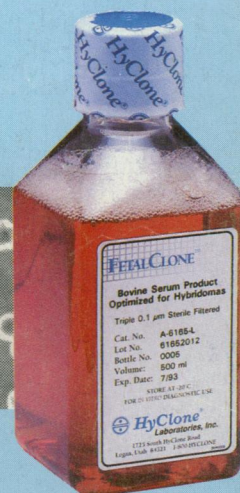


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cells at levels equal to FBS-containing media. Low cost, high performance, and ample supply make FETALCLONE an ideal FBS alternative.



Antibody production was measured via sandwich ELISA with alkaline phosphatase conjugate. Cells were maintained for 3 days, the supernates were collected, diluted and assays were performed. Optical densities (405nm) were plotted versus dilution of supernate.

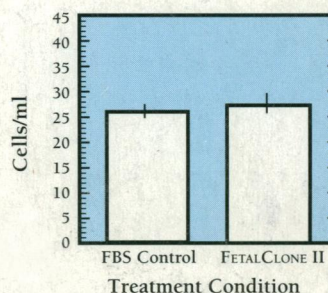


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