

Microplate Instrument

The CERES 900 microplate instrument is designed to simplify immunoassay procedures, including endpoint and kinetic enzyme-linked immunosorbent assays, and scanning for determining agglutination patterns and cell counting. Applications include protein determination, cytotoxicity, cell growth, and agglutination assays. **Bio-Tek Instruments.** Circle 139.

Chromatography Modeling Software

DryLab version 1.5 software for modeling chromatography separations features gas chromatography (GC) modeling and enhanced modeling of liquid chromatography separations. In addition to modeling changes in percent organic solvent, gradient conditions, column conditions, and flow rate, DryLab 1.5 models temperature program for GC separations, changes in pH, additive-buffer concentration, ternary mobile phases, and ionic strength. DryLab is available for Microsoft Windows, Macintosh, and MS DOS operating systems. **LC Resources.** Circle 140.

Formaldehyde Neutralization System

Neutralin neutralizes formaldehyde, glutaraldehyde, and other aldehyde solutions by converting them into a nonhazardous polymer and water. It eliminates fumes and vapors, thereby reducing exposure risks. With Neutralin, aldehydes can be disposed of at the time they are used, greatly reducing the risk of spills. Af-

ter treatment, they are no longer toxic, and can be disposed of as nonhazardous wastes. The user simply pours used formalin solutions into a pail containing Neutralin and agitates. Neutralization occurs overnight with no further steps. **National Diagnostics.** Circle 141.

Skin Protector

DermaPlus creates an invisible barrier that bonds to the skin. This inert, nonionic, hydrophobic monomolecular layer prevents the skin from coming into contact with both chemically and biologically hazardous materials, including germs, bacteria, fungi, harsh chemicals, fuels, infectious wastes, corrosives, and pesticides. It comes in an aerosol can with no chlorofluorocarbons, and begins working within 5 min after application. One application lasts up to 4 hours and cannot be washed off. **Benchmark Enterprises.** Circle 142.

Data Analysis Software

STATlab and GEOLab are English-language versions of object-oriented exploratory data analysis and mapping products designed for Microsoft Windows by SLP Statistiques. STATlab enables the user to analyze large problems graphically, without having to be a mathematics or statistics expert. GEOLab is an add-on module that enables STATlab to display and create data analytic maps. **SciTech.** Circle 143.

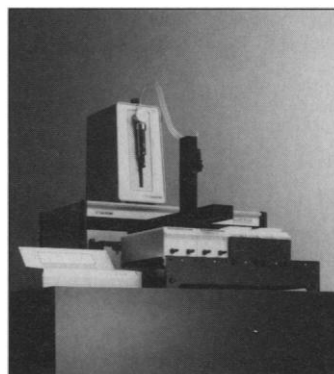
Protein Detection

Chemiluminescent Western Blotting Kits for detection of proteins eliminate the sensitivity

limitations of colorimetric methods and the safety hazards of radioactive systems. These kits and reagent set deliver hard-copy, quantifiable results and are stable for 12 months. This line of luminol-based products includes two complete kits for use with mouse and rabbit secondary antibodies and a reagent set for use with a variety of antibody combinations. **Boehringer Mannheim.** Circle 144.

HPLC Column Switching System

The 233 XL System for on-line column switching is a sample processor and injector designed to automate column switching applications, sophisticated sample



preparation, and on-line injection to one or two high-performance liquid chromatography systems. The system features two electrically actuated rheodyne valves that can be configured as injection or switching valves. Some of the more common column switching techniques that can be automated by the 233 XL include column backflushing, on-line sample clean-up, trace enrichment in a cartridge, and fraction collection and reinjection. The system's software requires no prior programming knowledge. **Gilson Medical Electronics.** Circle 145.

Literature

BioLink newsletter covers the latest developments in cell pathology research. Recent issues have featured articles on in situ hybridization, quality control for immunohistochemistry, tumor suppressor genes, and the prognostic value of angiogenesis. **BioGenex.** Circle 146.

The Resolution Times is a quarterly technical newsletter for separation scientists. Some of the features of each issue include "Column Applications," "Chromatography Calculations," "Troubleshooting," "Science News," "Chiral Corner," "Did You Know?," and new products. **Phenomenex.** Circle 147.

The current issue of the newsletter *Amplifications: A Forum for PCR Users* focuses on quantitative polymerase chain reaction (PCR). Articles include "Electrochemiluminescent Detection and Quantitation of PCR-Amplified DNA," "General Aspects of PCR Quantitation," and "Mapping DNA Lesions at the Gene Level Using Quantitative PCR Methodology." **Perkin-Elmer.** Circle 148.

Quick-Light Non-Isotopic Detection Systems is a brochure on probes that recognize microsatellites and other repetitive sequences in genomic DNA. The probes are oligonucleotides directly coupled to alkaline phosphatase that produce an image on x-ray film. The probes are sensitive enough to detect single-copy genes on membranes following Southern blots from agarose gels in as little as 1 µg of restriction enzyme-digested genomic DNA. Their small size allows for faster hybridization kinetics than radioactively labeled, randomly primed probes. **FMC Bioproducts.** Circle 149.

Solving the Purification Puzzle describes a line of protein purification products, including low-pressure chromatography systems, iso-electric focusing cells, and electrophoresis systems. **Bio-Rad Laboratories.** Circle 150.

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.

Science

PERSONNEL PLACEMENT

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POSITIONS OPEN

BAYLOR UNIVERSITY—EXPERIMENTAL PHYSICAL BIOCHEMIST. The Department of Chemistry invites applications for a tenure-track position at the ASSISTANT PROFESSOR level for fall 1994. The Department offers degrees in chemistry at the B.A., B.S., M.S., and Ph.D. levels. Candidates must have training, background, and research interests in experimental physical biochemistry, as evidenced by publications and course work at the undergraduate and/or graduate level(s). The successful applicant will be expected to establish an independent research program, to attract graduate students and extramural funding, and to demonstrate excellence in teaching standard chemistry courses (especially physical and biochemistry) at the undergraduate and graduate levels. A Ph.D. is required, an undergraduate degree in chemistry or biochemistry is preferred, and postdoctoral experience is highly desirable. Applicants should submit a letter of application, résumé, publication list, summary of research experience, graduate and undergraduate transcripts, and a statement of research interests and plans. At least three letters of recommendation should be sent directly to: **Dr. Mary Lynn Trawick, Chair, Faculty Search Committee, Department of Chemistry, P.O. Box 97348, Baylor University, Waco, TX 76798-7348.** The deadline for receipt of applications is January 14, 1994. *Baylor University is a Baptist University affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Opportunity Employer, Baylor University encourages minorities, women, and persons with disabilities to apply.*

PHYCOLOGIST

Applications are invited for a tenure-track position available 1 September 1994 at the rank of ASSISTANT PROFESSOR. Candidate should have postdoctoral training in phycology and a willingness to teach microbiology and courses in his/her area of specialization. The appointee is also expected to establish an independent program of research and to participate in graduate education.

Review of applications will begin 15 January 1994 and continue until the position is filled. Candidates should submit a letter of application, curriculum vitae, and names of three references to: **Dr. Daniel D. Jones, Department of Biology, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294-1170.**

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

FACULTY POSITION: PLANT PHYSIOLOGIST—The University of Richmond invites applications for a tenure-track position, preferably at the ASSISTANT PROFESSOR level. The primary teaching responsibility will involve undergraduate courses in general biology and plant physiology. In addition, the appointee will be expected to develop other undergraduate and M.S.-level courses in his or her specialty. Development of an active research program that will involve undergraduate and graduate students is expected. Candidates must have the Ph.D. degree, and postdoctoral experience is desirable. Submit curriculum vitae, undergraduate and graduate transcripts, a statement of teaching philosophy, research plans, and three letters of reference to: **Dr. F. B. Leftwich, Department of Biology, University of Richmond, VA 23173.** Consideration of applications will begin on January 15, 1994, and will continue until the position is filled. *The University of Richmond is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.*

ASSISTANT PROFESSOR

Mercyhurst College has developed a new tenure-track position to teach **human anatomy and physiology** courses. Applicants should also be qualified to teach **developmental biology** and/or **histology** to biology majors. Applicants will be expected to advise senior research projects, preferably as part of their own research program. Applicants should have completed their Ph.D. by September 1994. Send résumé and the names of three references to: **Dr. Lewis M. Lutton, Biology Department, Mercyhurst College, Erie, PA 16546** by February 11, 1994. *Mercyhurst College is an Equal Opportunity/Affirmative Action Institution.*

POSITIONS OPEN

Spelman College, Department of Biology, invites applications for one (1) tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR rank and one (1) 1-year faculty LECTURER appointment. **Tenure-track position:** Specialty in endocrinology, immunology, environmental toxicology or cell biology preferred. Responsibilities include teaching courses in general biology as well as advanced courses in the specialty and conducting research involving undergraduates. Ph.D. required; postdoctoral experience preferred. **Lecturer:** M.S. required; Ph.D. preferred. Responsibilities include teaching general biology to majors and non-majors. Send letter of application, curriculum vitae and statement of research interests by January 31, 1994, to: **Dr. Pamela Gunter-Smith, Chair, Department of Biology, Spelman College, Atlanta, GA 30314.**

Spelman College is an Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGIST. The Department of Biology, University of North Carolina at Chapel Hill, invites applications for a tenure-track faculty position. We seek an outstanding scientist using cellular or genetic approaches to study behavior and sensory systems. This appointment at the level of ASSISTANT PROFESSOR will be available July 1, 1994. Applicants should send curriculum vitae, a concise statement of research and teaching interests, selected publications, and four letters of recommendation to: **Edward Salmon, Chairman, Neurobiology Search, Department of Biology, CB#3280, University of North Carolina, Chapel Hill, NC 27599-3280.** Priority will be given to applications received by January 15, 1994. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

Cornell University Section of Biochemistry, Molecular and Cell Biology

Applications are invited for a tenure-track ASSISTANT PROFESSORSHIP in the area of Physical Biochemistry from individuals interested in applying multidimensional NMR to contemporary problems in biochemistry. Candidates will be selected based on accomplishments, strong motivation for creative research, and commitment to teaching. Applicants should send curriculum vitae and brief description of accomplishments and future research plans, and have 3 recommendation letters sent independently, by February 1, 1994, to: **Prof. D. Shalloway, Search Committee, Biochemistry, Molecular and Cell Biology, Biotechnology Building, Cornell University, Ithaca, NY 14853.**

Applications from women and minority group members are encouraged. Cornell University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR Department of Biological Sciences The University of Texas at El Paso (UTEP)

UTEP invites applications for two tenure-track positions at the Assistant or Associate Professor rank to begin September 1994:

(1) **INVERTEBRATE ZOOLOGIST**, specializing in the ecology, physiology, or systematic of invertebrates. Approaches that complement the University's focus on molecular mechanisms or environmental adaptations are sought in particular. Candidates should have a strong commitment to research and teaching at the undergraduate and graduate level.

(2) **LIFE SCIENCES EDUCATOR**, specializing in science education. Responsibilities will include the teaching of general and specialty courses in the biological sciences, and scholarly activity involving traditional research, science pedagogy, or the development of effective methods and materials for teaching in the life sciences. The successful candidate is expected to play a leadership role in the University's commitment to enhancing teacher preparation and improving the teaching of biology at all levels.

Both positions require a doctoral degree. Send curriculum vitae, statement of teaching philosophy, and a list of three references (name, address, telephone) to: **Louis Irwin, Chairman of Biological Sciences, The University of Texas at El Paso, El Paso, TX 79968.** Review of applicants will begin January 1, 1994. *UTEP does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.*

POSITIONS OPEN

ASSISTANT PROFESSOR (PLANT ECOLOGY)

The Department of Botany, Louisiana State University (LSU), invites applications for a tenure-track Assistant Professor position anticipated for August 1994, in the area of plant population or community ecology. Preference will be given to candidates with an experimental emphasis in warm temperate/tropical systems. A Ph.D. in botany/plant biology, or other appropriate biological science areas and evidence of research and teaching excellence are required. Responsibilities include establishing an active research program and directing Ph.D. students, in addition to teaching introductory and specialty courses in ecology and biology. Review of applications will begin on 1 February 1994, and will continue until the position is filled.

Send curriculum vitae and a brief statement of research goals, and arrange for three letters of reference to be mailed to: **Dr. Bruce Williamson, Chair, Plant Ecology Search Committee, Department of Botany, LSU, Baton Rouge, LA 70803-1705; Telephone: (504) 388-2116.** LSU is an Equal Opportunity/Access Employer.

FACULTY POSITION IN FOOD SAFETY

The UC Davis School of Veterinary Medicine invites applications from qualified individuals with a D.V.M. and/or M.D. degree in an area relevant to safety of foods of animal origin. Advanced training in a food safety area, such as microbiology or toxicology, is preferred. Knowledge of food animal production systems is highly desirable. Employment is at the (tenured) **ASSOCIATE or FULL PROFESSOR** level. Salary commensurate with training and experience. An indispensable position requirement is development of a productive research program in food safety directed toward methods to reduce risk of pathogenic microorganisms or chemical residues in foods of animal origin. Primary teaching responsibilities are at the professional, graduate professional, and graduate academic level and include courses in food safety and foodborne disease prevention. Additional responsibilities include coordination of the Food Science B.S./D.V.M. and campus food safety programs. The successful candidate will be expected to play a leadership role in development of the School's programs in food safety and participate in campus food safety programs. Qualified applicants should submit a letter of intent, curriculum vitae, and names of three references to: **Dr. Philip Kass, VM: Preventive Medicine, University of California, Davis, CA 95616-8735.** Applications will be accepted through December 31, 1993, or until a suitable candidate is identified. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

University of California, Santa Barbara (UCSB) FACULTY POSITION IN PROTEIN RECEPTOR STRUCTURE/FUNCTION

The Interdepartmental Biochemistry and Molecular Biology Program and the Department of Biological Sciences invite applications for an **ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR** position in our expanding program in structural biochemistry, cell and molecular biology. Research expertise and interest is sought in structure/function studies of protein receptors at the molecular level. The particular receptor system may represent any contemporary field of biology, but highest consideration will be given to individuals pursuing studies that are likely to elucidate fundamental biological principles in receptor-mediated processes, including but not restricted to, cell activation, cell differentiation, gene regulation and signal transduction. The rank of the appointment is dependent upon qualifications. Applicants must have the Ph.D. degree and relevant postdoctoral experience. The successful applicant will be expected to lead a vigorous independent research program and to participate effectively in the teaching programs of the Interdepartmental Biochemistry and Molecular Biology Program and the Department of Biological Sciences. Submit curriculum vitae, selected reprints, and a brief description of previous and anticipated research. Also, arrange to have at least three letters of reference sent to: **Director, c/o Frances McCutcheon, Interdepartmental Biochemistry-Molecular Biology Program, c/o Department of Biological Sciences, University of California, Santa Barbara, CA 93106.** Application deadline is January 15, 1994, or until position is filled. UCSB is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF WISCONSIN-STEVENS POINT (UWSP). Tenure-track **ASSISTANT PROFESSOR** position in biochemistry for fall 1994 in a 17-member, ACS approved department in a predominantly undergraduate institution. Ph.D. in chemistry or biochemistry required. Teach general chemistry and biochemistry as needs require. Expertise in metabolism or physiological chemistry preferred. Applicant must show promise of excellence in undergraduate teaching and research. Send résumé, transcripts, and statement of teaching philosophy and professional activities. Have three references write to: **Dr. James Brummer, Chair, Faculty Search, Department of Chemistry, UW-Stevens Point, Stevens Point, WI 54481.** All application materials must be received by January 15, 1994. *UWSP is an Affirmative Action/Equal Opportunity Employer.*

MINNEAPOLIS—UNIVERSITY OF MINNESOTA—DEPARTMENT OF PSYCHIATRY seeks Psychiatrists to fill two academic faculty positions. These full-time appointments will confer the rank of **ASSOCIATE PROFESSOR** with tenure, or probationary (tenure-track) **ASSISTANT PROFESSOR**, dependent on qualifications. The positions entail commitment to research and teaching. The successful applicants will share with other faculty members responsibility for one of several teams that treat hospitalized and non-hospitalized psychiatric patients. Each team, in addition to treating patients, has the responsibility of teaching residents, medical students and psychology interns. Although commitment to specific areas of interest is not a prerequisite, one of the positions available involves a well-established program in substance abuse. Applicants must be M.D., board certified or board eligible psychiatrists. Qualifications for Associate Professor: professional distinction in research and writing and demonstrated effectiveness in teaching and advising; Qualifications for Assistant Professor: demonstrated involvement in quality research accepted or published in peer-reviewed journals. Send curriculum vitae and letter of interest to: **Elke Eckert, M.D., Box 393 UMHC, Minneapolis, MN 55455.** Last day for receipt of application is January 31, 1994. Start date is July 1, 1994.

The University of Minnesota is an Equal Opportunity Educator and Employer.

Mount Holyoke College seeks to fill three separate one-semester **VISITING PROFESSOR** positions in environmental studies: one each for the fall of 1994, fall of 1995, and fall of 1996. Candidates should be accomplished senior scholars in areas related to environmental studies and may be from the natural sciences, social sciences or humanities. The specific field is not as important as a strong interest in interdisciplinary approaches to environmental problems and an ability to communicate with other scholars across disciplines. The visiting scholar will teach the senior seminar in environmental studies and take part in a lively program of campus talks and collegial discussion devoted to environmental studies. Opportunities for interaction with faculty in the other colleges in the Five-College area (Amherst, Smith, University of Massachusetts, and Hampshire) are also available. *Mount Holyoke is committed to cultural diversity and is an Equal Employment Opportunity and Affirmative Action Employer. Women and minorities are especially encouraged to apply.* The evaluation of applications will begin on February 1, 1994. Send a letter of application, curriculum vitae, and letters of reference to: **Douglas J. Amy, Chair, Environmental Studies Program, Mount Holyoke College, South Hadley, MA 01075.**

MOLECULAR/CELLULAR BIOLOGIST (Ph.D.)

The University of Tennessee, Memphis, has an opening for a molecular/cellular biologist at the rank of **ASSISTANT PROFESSOR** with tenure track and a possible joint appointment in a basic science department. This position requires an individual with relevant experience and interest in studies relating insulin and growth factors receptors to various insulin-resistant states. Requirements include at least two years of postdoctoral training in related molecular biology laboratory and tangible evidence of productivity. Send curriculum vitae, names of references, and outline of research interest to: **Abbas E. Kitabchi, Ph.D., M.D., Chief, Division of Endocrinology, The University of Tennessee, Memphis, 951 Court Avenue, Room 335M, Memphis, TN 38163.** *The University of Tennessee is an Equal Employment Opportunity/Title IX/Section 504/Affirmative Action Employer.*

POSITIONS OPEN

EUKARYOTIC GENETICIST. The Program in Medical Sciences and the Department of Biological Science of the Florida State University invite applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. The selected candidate will have had extensive graduate and postgraduate experience with either classical or molecular genetics and will be expected to develop a competitive research program that utilizes a mainstream eukaryotic model to study important molecular, cellular, organismal or developmental processes. Excellent departmental support facilities are available, and numerous opportunities exist for interactions with ongoing research programs in genetics, cell and molecular biology, structural biology, and neuroscience. Teaching responsibilities will include a cell and molecular biology course for first-year medical students that emphasizes the molecular basis of human genetic diseases. Send curriculum vitae, a concise description of research interests, and the names, addresses, and telephone numbers of three references to: **Bonnie Wright, Genetics Search Coordinator, Program in Medical Sciences, 104 SCN, The Florida State University, Tallahassee, FL 32306-4051.** Review of applications will begin January 15, 1994.

The Florida State University is an Equal Opportunity/Affirmative Action Employer.

PLANT ECOPHYSIOLOGIST

Tenure-track **ASSISTANT PROFESSOR** position to be filled August 1994. Ph.D. required. Field-oriented postdoctoral research and teaching experience preferred. Teaching includes undergraduate courses in plant physiology and introductory plant sciences, and graduate courses in area of specialty. Productive research, aggressive pursuit of extramural support, and supervision of M.A. and Ph.D. students are required. Send statements of research and teaching interests, curriculum vitae, and three letters of reference to: **Plant Ecophysiology Search Committee, Division of Biological Sciences, University of Montana, Missoula, MT 59812** by 24 January 1994. *Women and minorities will be actively recruited and are strongly urged to apply. Equal Employment Opportunity/Affirmative Action.*

IOWA STATE UNIVERSITY DEPARTMENT OF ANIMAL ECOLOGY

Applicants sought for three **ASSISTANT/ASSOCIATE PROFESSOR** tenure-track, academic-year appointments. Ph.D. in ecology or related discipline required. Independent research and teaching experience preferred with expertise in areas of either (1) **aquatic ecology**, (2) **conservation biology**, (3) **community/ecosystem ecology**. Responsibilities include research that will relate, in part, to agriculturally dominated ecosystems, teaching and advising of undergraduate and graduate students, and contributions to outreach programs. Starting date August 21, 1994. Request detailed position descriptions by letter, **Telephone: (515/294-6148) or FAX: (515/294-7874).** To apply, send curriculum vitae, statement of career plans, teaching and research interests, and names and addresses of three references to: **Faculty Search Committee, Department of Animal Ecology, 124 Science II, Iowa State University, Ames, IA 50011.** Closing date: February 1, 1994, or until position is filled. *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

The Department of Psychology, University of Maryland, College Park: Seeks an **ASSISTANT PROFESSOR** in BioPsychology. Persons applying preferably should have completed a Postdoctoral Fellowship. We seek a scientist who has the potential to make major contributions to knowledge in BioPsychology, and particularly need someone with primary interests in modern methods of neuroscience (for example, neurophysiological, neurochemical or neuropharmacological approaches) applied to the study of behavioral and/or neural plasticity. Applicant should have a record of, and the potential for, continued extramural funding. All applicants should send curriculum vitae, reprints, statement of research and teaching interests, and at least three letters of reference to: **Professor Robert J. Dooling, Department of Psychology, University of Maryland, College Park, MD 20742.** *Women and minorities are encouraged to apply. The University of Maryland actively subscribes to a policy of Equal Educational and Employment Opportunities.* For best consideration, materials should be received by February 15, 1994.

Mitotix, Inc., is a biopharmaceutical company, developing cell-cycle based therapeutic products for cancer and infectious diseases.

We are looking for creative, highly motivated and enthusiastic Scientists with a strong record of achievement in either the academic or industrial environment.

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Ph.D. level with experience in macromolecular computer modeling and/or protein structure determination by physico-chemical methods.

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Ph.D. and BS/MS level with research experience in the design, synthesis, purification and physicochemical characterization of pharmacologically potent structures. Candidates will be dedicated to actively interact with the Protein Biochemistry and Structural Biology groups. Skills in computer-aided design and SAR are pluses.

Send a curriculum vitae to: **Human Resources, Mitotix, Inc., One Kendall Square, Building 600, Cambridge, MA 02139, USA.**

BIOPHARMACEUTICALS

PROGRAM DIRECTORS & SCIENTISTS DRUG DELIVERY & GENE THERAPY

INEX Pharmaceuticals Corporation is an innovative and creative leader in the development of systems for the targeted delivery of biologically active agents in vivo. This includes the intracellular delivery of antisense oligonucleotides and DNA vectors. Gene therapy is a key focus of the Company. Applications are invited for the following positions.

MOLECULAR BIOLOGY

These positions will focus on the development of DNA vectors for the tissue specific expression of genes. Scientists with experience in vector construction, gene transfer and tissue specific regulation of gene expression are particularly encouraged to apply.

Director, Molecular Biology: A senior position requiring a Ph.D. in molecular biology and at least 5 years of research/industrial experience. A strong publication record, excellent communication skills and proven project management abilities are essential. Experience in clinical aspects of gene therapy would be an asset.

Scientists, Molecular Biology: Positions are available for recent Ph.D. graduates in molecular biology. Experience with gene cloning, expression techniques and transcription factors in mammalian systems is advantageous.

IMMUNOLOGY

These positions will focus on the design of transmembrane carrier systems which are physically targeted to disease sites, as well as delivery systems designed to regulate the immune response. Scientists with experience in antibody based delivery systems and receptor mediated targeting protocols are particularly encouraged to apply.

Director, Immunology: A senior position requiring a Ph.D. in Immunology or related discipline and at least 5 years of research/industrial experience. A strong publication record, excellent communication skills and proven project management abilities are essential.

Scientists, Immunology, Biochemistry, Virology. Positions are available for recent Ph.D., graduates with backgrounds in these fields. Experience in protein biochemistry, animal model systems and viral immunology would be an asset.

Inex Pharmaceuticals is committed to attracting top candidates for the positions. Salary and benefits packages, commensurate with experience, are most competitive. The opportunity exists for rapid career development associated with an expanding company. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. For consideration please forward your resume to Manager, Human Resources, Inex Pharmaceuticals Corporation, #305 - 1700 West 75th Avenue, Vancouver, British Columbia, Canada V6P 6G2.



FACULTY POSITIONS IN BIOCHEMISTRY

St. Jude Children's Research Hospital

St. Jude Children's Research Hospital, Danny Thomas, *Founder*, a private research institute, is engaged in a major expansion of its facilities and scientific activities. A new research building which opened in August, 1991, provides 240,000 square feet of new laboratory space to house the institute's basic science programs. As part of the expansion, new faculty positions are now available in the Department of Biochemistry. Although preference will be given to applicants who have recently completed postdoctoral training and are seeking positions at the level of Assistant Member, investigators with appropriate research interests and qualifications will be considered for positions of higher faculty rank. Candidates with programs focusing on the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of signal transduction, and mechanisms of gene regulation are particularly encouraged to apply. Opportunities exist for collaborative interactions with basic research programs in Virology and Molecular Biology, Immunology, Tumor Cell Biology and Pharmacology, as well as with clinical investigators in Hematology/Oncology and Infectious Diseases. In addition to new facilities and excellent start-up funds, salaries are nationally competitive and include a generous benefits package. A strong institutional commitment to its faculty ensures stability in program development and continuity of research activities.

Applicants should submit a curriculum vitae, a letter summarizing their research accomplishments and goals, and the names of three references to:



**Dr. James N. Ihle, Chairman
Department of Biochemistry
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105 USA**

St. Jude is an affirmative action/equal opportunity employer.

Imagenetics, Inc. is a growing subsidiary of Amoco Technology Company focusing on "in vitro" medical diagnostics, specifically in the areas of genetic and cancer diagnostics. Imagenetics is located in the western Chicago suburbs in the Technology Corridor. We have immediate openings for two PhD Scientists and one BS/MS Scientist to join our team developing DNA probe diagnostics.

PROBE DEVELOPMENT SCIENTISTS

One candidate must have a PhD and/or MD with 3-5 years post-doctoral experience (industrial preferred) with extensive background in human molecular genetics/oncology and a mastery of current recombinant DNA techniques. Position involves bench work directed toward acquiring human clones, converting these clones into prototype DNA fluorescence in situ hybridization probes, supervision of technical staff, and evaluation of new technologies and genes in the field of molecular diagnostics (Position SS-716).

The other candidate must have a BS/MS in Biology or Molecular Biology with 2-4 years of experience (industrial preferred) with a background in molecular genetics and a mastery of recombinant DNA techniques (Position-SS1120).

ASSAY DEVELOPMENT SCIENTIST

The candidate must have a PhD and/or MD with 3-5 years post-doctoral experience, preferably in the area of biomedical assay development (industrial preferred) with extensive background in immunodiagnosics and/or DNA hybridization. The individual will provide specialized expertise in molecular diagnostic methods (Position SS-1121).

Knowledge of flow cytometry, immuno-histochemistry, in situ hybridization and other cell analysis tests is desirable for all positions. The successful candidates must be able to work effectively within a team environment.

For immediate and confidential consideration, please state the position for which you are applying and mail your resume by December 17th to:

AMOCO RESEARCH CENTER

Recruiting Coordinator

P.O. Box 3011 - F-3/HR (Position Code)

Naperville, IL 60566

Equal Opportunity Employer M/F/H/V

IMAGENETICS

FACULTY POSITIONS MICROBIOLOGY, PHARMACOLOGY AND THE CANCER CENTER

MEDICAL COLLEGE OF WISCONSIN

The Departments of Microbiology and of Pharmacology and Toxicology in conjunction with the Cancer Center are seeking highly qualified applicants for Assistant or Associate Professorships in the tenure-track. Preference will be given to investigators employing molecular and biochemical approaches to the study of oncogenes, receptors and signaling in malignant and transformed cells, the role of growth factors and cytokines, pathogenesis of angiogenesis, or mechanisms of action of or resistance to chemotherapeutic agents. Applicants must have a doctoral degree in a relevant field, a minimum of two years of post-doctoral experience, a strong record of research accomplishments, a commitment to developing an independent, extramurally funded research program and a willingness to participate in graduate and medical team teaching. Modern facilities include core laboratories for peptide/DNA synthesis and analysis, flow cytometry, LC/GC/MS, NMR, and ESR. Competitive salaries, space and start-up funds are available. Applicants should send a curriculum vitae, statement of research interest and plans, three relevant reprints, and the names of three references to:

Molecular Search Committee

The Cancer Center

Medical College of Wisconsin

8701 Watertown Plank Road

Milwaukee, WI 53226

MCW is an Affirmative Action/Equal Opportunity Employer M/F/H.

MICROBIOLOGICAL ASSOCIATES INC.

MICROBIOLOGICAL ASSOCIATES, INC. (MA) is a leading international provider of toxicological and biotechnology safety testing services. With our growing commercial and contract services businesses, we have immediate openings for several Ph.D.'s to join our scientific staff.

STUDY DIRECTORS

These three **STUDY DIRECTOR** positions will be responsible for the supervision of testing programs as well as interaction with clients:

BIOTECHNOLOGY SERVICES - Requires a Ph.D. in Cell Biology or Virology, 5+ yrs. experience in cell culture and viral assays and 2+ yrs. lab management. Industrial lab experience, GLP and/or GMP, and bio-safety testing background preferred.

IN VITRO TOXICOLOGY - Requires a Ph.D. with emphasis in Mammalian Cell Biology or Cellular Toxicology/Pathology, 2+ yrs. relevant experience with cell culture and/or cell biochemistry. Previous supervisory experience necessary. Excellent communication skills essential. Experience with the toxicology of consumer products a plus.

MOLECULAR TOXICOLOGY - Requires a Ph.D. plus post-doctoral training in general Molecular Biology. Experience and skills should include PCR, Southern, Northern and Western blots; and DNA and RNA isolation. Experience with oncogenes and toxicology is preferred.

BIOANALYTICAL SERVICES DIRECTOR

This individual will be responsible for launching a new Division focused on the biochemical analysis of proteins, carbohydrates and nucleic acids. The Director will also be responsible for the overall technical conduct of studies under GLP/cGMP guidelines and for planning, directing and coordinating the validation of new assays. Other duties include management of the technical staff, support of the technical sales efforts, and interactions with clients and regulatory authorities. A Ph.D. in Biochemistry or a related field and 6+ yrs. experience managing a laboratory, preferably in a start-up situation, would be ideal.

Join us as we build on our 40-year tradition of scientific excellence. Our state-of-the-art facilities are located in the Washington, D.C. suburbs. Please send your C.V. and salary requirements to the Human Resources Department, MICROBIOLOGICAL ASSOCIATES, INC., 9900 Blackwell Road, Rockville, MD 20850, Fax: 301/738-1036. EOE/m/t/d/v.

LEAD SCIENTIST/BIOLOGICAL MACROMOLECULAR CRYSTALLOGRAPHY

With our combination of scientific rigor and programming excellence, BIOSYM is the recognized leader in the field of computer-aided molecular design. We have a unique opportunity to create an X-ray crystallography software package which will integrate all phases of biological macromolecular structure elucidation by X-ray crystallography with state-of-the-art molecular modeling software.

Currently, we have an immediate need for an innovative and creative professional to lead a team in the design, development and validation of this software. The selected candidate will play a key role in the collaborative development of design objectives with the commercial X-ray focus group members and manage the project from inception to implementation.

Requirements include a Ph.D. in Chemistry, Biochemistry or Physics, 2-5 years' experience in structure elucidation methodologies of peptides, proteins and/or nucleic acids by X-ray crystallography. Experience with "C", FORTRAN and UNIX is desirable. Outstanding leadership, interpersonal and written/oral communication skills required.

If you possess these qualifications, we are interested in exploring new opportunities with you. BIOSYM offers a full range of benefits and a competitive compensation plan. Please send resume and salary history, in confidence, to: Attn: Posting #662, BIOSYM TECHNOLOGIES, INC., 9685 Scranton Road, San Diego, CA 92121. EOE/M/F/H/V.

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Alpha-Beta Technology is the leader in carbohydrate-based biopharmaceutical product development. Our lead product, BETAFFECTIN™, a carbohydrate-based immune modulator, is rapidly moving toward commercialization. We are searching for additional scientific talent to lead and support our advanced clinical trials and our multiple product development programs in anti-infectives, hematopoiesis, cholesterol-lowering, wound healing and inflammation.

DIRECTOR, CELL BIOLOGY

You will provide scientific and managerial leadership for multi-disciplinary Cell Biology, Hematology and Immunology groups. Reporting to the Vice President of Research, the Director will assist in the formulation of the Company's goals, the evaluation of new technologies, and the establishment of academic and industrial collaborative programs. Requires a PhD or equivalent in cell biology, immunology or related discipline, with 5-7+ years' experience managing pharmaceutical research and development groups. A strong scientific background in the areas of anti-infectives, hematopoiesis, cholesterol-lowering, wound healing or inflammation is required, as well as experience in project management, budget administration and the supervision of senior scientific staff.

GROUP LEADER, ANALYTICAL CHEMISTRY

Responsible for supporting all Alpha-Beta products currently in development, this position requires an experienced leader to manage our Analytical Chemistry group in developing methods for product and contaminant characterization and quantitation. Proven experience in the transfer of analytical technology to Quality Control is also required. Requires a PhD in Analytical Chemistry with a solid background in analytical chemistry or biochemistry, 4-5+ years of pharmaceutical or related industry experience, preferably in biological drug development, broad scientific exposure including carbohydrates and proteins, and a strong publication record. Supervisory and budget management experience also required.

GROUP LEADER, MOLECULAR BIOLOGY

You will be challenged to build a eucaryotic molecular biology group whose primary focus will be the study of carbohydrate-specific cell receptors and signal transduction pathways. Requires a PhD in Cell/Molecular Biology, 4-5+ years of experience demonstrating scientific excellence in the study of molecular aspects of receptor-mediated signal transduction, as well as supervisory and budget management experience.

Alpha-Beta Technology is conveniently located in the fast-growing Biotechnology Park in Worcester, MA, 40 miles west of Boston. We offer competitive salaries and a strong benefits package that includes 3 weeks vacation your first year, a 401(k) Plan, and an environment that fosters professional development and teamwork. Please send your curriculum vitae in confidence, referencing specific position, to: Alpha-Beta Technology, Human Resources, Box S123, One Innovation Drive, Worcester, MA 01605. An equal opportunity employer.

**ALPHA - BETA
TECHNOLOGY**

ASSISTANT PROFESSOR, PHYSIOLOGY

The University of British Columbia

The Department of Physiology, University of British Columbia, invites applications for two tenure track faculty positions at the Assistant Professor level. Applicants should possess an M.D. and/or Ph.D. in an appropriate biological science and have two or more years of post-doctoral experience. They should be able to provide evidence that they will be able to establish a strong independent research program and obtain grant support from appropriate agencies. Research interests may be in any area of Physiology, however, successful applicants will be expected to teach undergraduate science students and medical students in organ system physiology not necessarily related to their area of research. Competence in medical and undergraduate teaching will be an important selection criteria. Salary will be commensurate with qualifications and experience. Starting dates are negotiable but it is intended to fill both positions by September 1, 1994. The positions are subject to final budgetary approval.

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

Applications including curriculum vitae, a brief statement of research interests and the names of three individuals willing to supply a letter of reference should be **submitted by January 1, 1994** to:



Dr. K.G. Baimbridge
Head, Department of Physiology
University of British Columbia
Vancouver, B.C. CANADA V6T 1Z3

RESEARCH MICROBIOLOGIST

Rohm and Haas Company, a leading multinational chemical company, seeks a Ph.D. microbiologist or microbial physiologist for development and applications research in Biocides. This position is at our Corporate Research Center in Spring House, PA, near Philadelphia. Typical applications of our industrial biocides include: water treatment (cooling towers and pulp & paper), cosmetics, paint, wood preservatives and marine antifoulants.

Our opening requires an innovative professional with broad interests in both research and business-related developments. The successful candidate will have a Ph.D. degree in microbiology, microbial ecology or microbial physiology. A solid background in organic chemistry is essential. Although not required, postdoctoral or work experience in industrial microbiology would be beneficial. In addition to documented scientific excellence, effective oral and written communicating skills and the ability to work in a multifunctional team environment are imperative.

Rohm and Haas offers a highly competitive salary and benefits program, including relocation assistance. We also provide many programs for the professional growth of our scientific staff. Candidates must be legally entitled to hold regular employment in the U.S.

For consideration, please forward your resume or c.v., including a publications list and references, to: **Corporate Staffing #1993, Rohm and Haas Company, 727 Norristown Road, Building 70, Spring House, PA 19477.**



An Equal Opportunity Employer M/F/D.

POSITIONS OPEN

BIOCHEMISTRY/MOLECULAR BIOLOGY AND PHYSICAL BIOCHEMISTRY MEHARRY MEDICAL COLLEGE

Faculty positions will be available in 1994 in the Department of Biochemistry, at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science departments are possible. We are seeking individuals who have potential or demonstrated competence in physical biochemistry or in the use of molecular biological approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problem(s). Selected individuals must also be capable of, and committed to, making significant contributions to the teaching and administrative functions of the department of biochemistry. Successful applicants will be expected to develop/maintain a funded research program of high quality and to participate in the graduate and professional (medical, dental and allied health) school teaching programs of the Department. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary (not exceeding 3 pages) of potential research project(s) to: **Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208. An Equal Opportunity/Affirmative Action Employer.**

EVOLUTIONARY PLANT SYSTEMATIST

The Department of Biological Sciences, University of Wisconsin-Milwaukee, invites applications for a tenure-track position in plant systematics at the **ASSISTANT PROFESSOR** level. We seek applicants with broad training in the plant sciences and expertise in evolutionary biology. Preference will be given to candidates whose research program incorporates molecular approaches; postdoctoral experience desirable. This position offers the opportunity to interact with a number of faculty interested in evolutionary biology, conservation biology, aquatic/terrestrial ecology, and molecular biology. Candidates are expected to develop a vigorous research program and advise doctoral and Master's students. Teaching responsibilities will include a course in plant systematics and participation in the general biology curriculum.

Applicants should submit curriculum vitae, statements of research and teaching interests, pertinent reprints, and arrange to have three letters of reference sent to: **Chairperson, Plant Systematics Search Committee, Department of Biological Sciences, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI 53201. Deadline for applications is February 1, 1994. The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action Employer. Women and minority scientists are encouraged to apply for this position. The names of those nominees and applicants who have not requested that their identities be withheld and the names of all finalists will be released upon request.**

ASSISTANT PROFESSORS COMMUNITY ECOLOGY MICROBIOLOGY

The Department of Biology at the University of Central Arkansas invites applications for two tenure-track assistant professor positions to begin in August 1994:

(1) **Community ecology:** Teach general ecology and introductory biology courses. Expertise in biostatistics is desirable.

(2) **Microbiology:** Specialization in immunology and experience with cell culture and viruses desirable. Teach microbiology-immunology and introductory biology courses.

Both positions require the establishment of active research programs and supervision of M.S. thesis research. Recent Ph.D.'s are encouraged to apply. Submit letter of application, curriculum vitae, copies of all transcripts, a brief description of teaching philosophy and research interests, and three letters of recommendation to: **Dr. Don Culwell, Chairman, Ecology (or Dr. Derald Smith, Microbiology) Search Committee, Department of Biology, University of Central Arkansas, Conway, AR 72035. Telephone: 501-450-3146; FAX: 501-450-5914. Review of applications will begin January 3, 1994, but may continue until the positions are filled. The University of Central Arkansas is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT PROFESSOR, GENETICS AND DEVELOPMENTAL BIOLOGY. Denison University, a selective liberal arts college near Columbus, Ohio, invites applicants for a tenure-track position that starts in late August 1994. The annual teaching responsibilities of the successful candidate are a course in general genetics, a general course in developmental biology, and participation in our introductory cell and molecular biology course. The successful candidate will also develop a research program and advise undergraduate research projects. Ph.D. required. Submit curriculum vitae, undergraduate and graduate transcripts, and letters from three referees by January 14, 1994, to: **Kenneth Klatt, Department of Biology, Denison University, Granville, OH 43023. Denison University is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.**

ASSISTANT PROFESSOR, PLANT PATHOLOGY. Applications are invited for a plant pathology position located at the Texas A&M Research and Extension Center, Lubbock, Texas. The position will be joint between the Texas Agricultural Experiment Station (75% research) and Texas Tech University (25% teaching). An individual is sought who can establish a strong research program in the management of soil-borne diseases of Texas crops and can develop extramural funding for the research. Teaching could include undergraduate and/or graduate-level course(s) in plant pathology. The individual will be expected to work closely with other members of a multidisciplinary team. Applicants should submit by January 15, 1994, a letter of application (containing goals and research interests), curriculum vitae, transcripts, and three letters of reference to: **Dr. John R. Abernathy, Resident Director, Texas A&M Center, Route 3, Box 219, Lubbock, TX 79401; Telephone: (806/746-6101). Texas A&M University System is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.**

CHEMISTRY FACULTY POSITION for toxicologist with strong chemistry or biochemistry background. Tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** rank beginning fall 1994. Ph.D. and evidence of promise of excellence in both teaching and research required. Responsibilities include teaching chemistry courses at introductory level as well as undergraduate/graduate (M.S. level) courses in toxicology and biochemistry, and developing research program. Submit letter of application with names of three references, résumé, undergraduate and graduate transcripts (copies acceptable), statement of teaching philosophy, research interests, equipment requirements, preferably by January 3, 1994. Have three letters of recommendation and above materials sent to: **Position F9409, 204 King Hall, EASTERN MICHIGAN UNIVERSITY, Ypsilanti, MI 48197. Women and members of minority groups are encouraged to apply. Affirmative Action/Equal Opportunity Employer.**

CELLULAR AND MOLECULAR PHYSIOLOGY OR PHARMACOLOGY at **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Applications are invited for a full-time tenure-track position in the Department of Veterinary Physiology and Pharmacology. Applicants should have a Ph.D. or equivalent degree and at least 3 years of postdoctoral experience. Requirements will be: to develop an independent, extramurally funded, integrative research program that complements existing programs within the department and the NCI-designated Cancer Center; a demonstrated interest in translational research; a commitment to excellence and participation in one or more of our educational programs, which include courses offered to undergraduate, graduate, veterinary, and medical students; and a commitment to the goals of the department and school. Research areas of special interest include signal transduction, gene transfer, cell cycle regulation, receptor pharmacology, intracellular targeting, channels, and transporters. Applicants should send curriculum vitae; relevant reprints; a 1 to 3 page description of teaching interests and research plans and goals; and address, telephone, and FAX numbers of 3 references to: **Dr. Gordon L. Coppoc, School of Veterinary Medicine, Purdue University, West Lafayette, IN 47907-1246. Review of applications will begin January 1, 1994; anticipated filing date is July 1, 1994. Minority and female applicants are especially welcome. Purdue University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

TWO ASSISTANT PROFESSOR BIOLOGY POSITIONS

Hollins College, a selective, private, four-year liberal arts college for women, invites applications for two positions starting September 1, 1994. Candidates are expected to have completed the Ph.D. by the time of appointment. The first position is for 3 years (with the possibility of renewal) for a Cellular-Molecular Biologist who can teach undergraduate courses in cell/molecular biology, molecular and mendelian genetics, and microbiology. The second position is a tenure-track position for a broadly trained Biologist to teach courses such as ecology, vertebrate zoology, comparative anatomy, histology and possibly developmental biology. All members of the department share responsibility for various beginning-level courses. Average teaching load is four to five courses per year including appropriate laboratories and the January short term. Successful applicants are expected to develop an active research program involving undergraduate students. Curriculum vitae, transcripts, statement of teaching and research interests and experience, copies of significant publications, and three letters of recommendation should be sent to: **Dr. Harriet Gray, Chair, Department of Biology, Hollins College, P.O. Box 9616, Roanoke, VA 24020 by December 31, 1993.**

Hollins is an Equal Opportunity Employer and encourages applications from women and minorities.

DEVELOPMENTAL BIOLOGIST, Eastern Michigan University: Tenure-track **ASSISTANT PROFESSORSHIP** available fall 1994. Department of Biology consists of 23 full-time faculty, offers undergraduate and graduate (M.S.) programs. We seek a developmental biologist working at the molecular level, able to teach developmental biology and genetics. Position requires Ph.D., teaching experience, successful research program capable of attracting external funding. Submit letter of interest, curriculum vitae, transcripts, description of research, recent reprints, three letters of reference, preferably by December 31, 1993, to: **Position F9411, 204 King Hall, EASTERN MICHIGAN UNIVERSITY, Ypsilanti, MI 48197. For additional information contact: Dr. Douglas Shapiro, Department Head, (313) 487-4242. Women and members of minority groups are encouraged to apply. Affirmative Action/Equal Opportunity Employer.**

The Department of Biochemistry at Wayne State University School of Medicine invites applications for tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Consideration will be given to outstanding individuals who work within the broad areas of biochemistry and molecular biology. The candidate will be expected to establish an independent research program, to participate in medical and graduate education. Candidates should have a Ph.D. or M.D. degree with relevant postdoctoral training. Please send curriculum vitae, a brief description of research goals and the names of three references by February 1, 1994, to: **Dr. C. P. Lee, Search Committee Chair, Department of Biochemistry, Wayne State University School of Medicine, 540 East Canfield Street, Detroit, MI 48201. WSU is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

ASSISTANT PROFESSORSHIPS (2). Tenure-track starting September 1, 1994. Ph.D. in Biology with computer expertise, commitment to teaching, development of an active research program that includes student participation. Professional activities expected.

V-23 Vertebrate Ecology. Teach undergraduate and M.S. Ecology, Environmental Biology, and undergraduate Animal Form and Function. Must have teaching interests and research experience in field work.

V-24 Animal Molecular Biology. Teach undergraduate and M.S. Cell and Molecular Biology courses and undergraduate Biology courses. Develop research program in experimental Animal Molecular Biology.

Send letter of application, curriculum vitae, a brief statement of research and teaching interests and 3 letters of recommendation to: **Dr. Bonnie Lustigman (V-23 or V-24), Biology Department, Montclair State College, Upper Montclair, NJ 07043.**

Review of applications and résumés will begin on February 1, 1994, and continue until an appointment is made.

Montclair State College is an Equal Opportunity/Affirmative Action Institution. Subject to available funding.

ASSOCIATE PROFESSOR IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Queensland University of Technology is one of Australia's largest universities operating on five campuses with 25,000 students. One of the most senior levels of academic appointment in Australian universities is Associate Professor. The School of Life Science is seeking an Associate Professor to head the Biochemistry and Molecular Biology Division. The appointee will develop new initiatives in the teaching of biochemistry and molecular biology to undergraduate and postgraduate students. The appointee should have demonstrated research excellence in the area of biomedical science and will enhance active growth factor research programs within the Centre for Molecular Biotechnology.

Women are under-represented at QUT at this level; therefore suitably qualified women are encouraged to apply.

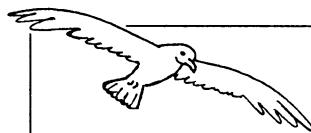
QUALIFICATIONS/SKILLS: Applicants should meet the University criteria for appointment as an associate professor and must have a Doctoral qualification in a relevant area, or equivalent accreditation or standing.

CONDITIONS: The position is tenurable at the level of Associate Professor - \$US39,883 - \$US43,939 (\$AUD60,475 - \$AUD66,625 per annum). Conditions include subsidised superannuation, relocation assistance, and professional experience leave. Smoking is not permitted in QUT buildings or vehicles.

FURTHER INFORMATION: Before submitting an applications, the duty statement, selection criteria and information on the position and University should be obtained from QUT's Human Resources Department, telephone 617 856 4002 or facsimile 617 856 0273. For further information on the position contact Professor Vicki Sara on 617 864 2182 or facsimile 617 864 1534.

APPLICATIONS: Applications and envelopes should quote 466/93. Applications must **systematically address the selection criteria** and include copies of applicant's three best papers, evidence of academic qualifications, experience and teaching evaluations plus the names, addresses, telephone and facsimile numbers of five academic or professional referees. Applications should reach the Human Resources Director QUT, Locked Bag No. 2, Red Hill, Queensland 4059, Australia by 25 February 1994.

An Equal Opportunity Employer



BROOKHAVEN
NATIONAL LABORATORY

DEPARTMENT OF APPLIED SCIENCE

The Department of Applied Science seeks a PhD scientist specialized in plant physiology, with a strong record of accomplishment in field research on the responses of photosynthesis to elevated CO₂, preferably at the canopy level. The ability to build and operate novel equipment for field research is essential. The successful candidate will join the Free-Air CO₂ Enrichment (FACE) Program in early 1994 and will participate in team research activities at various FACE locations within the U.S. and abroad.

Scientists at all career levels are invited to apply. Candidates should submit a curriculum vitae and the names of three references by December 31, 1993, to: Dr. George R. Hendrey, Biosystems and Process Sciences Division, Department of Applied Science, Brookhaven National Laboratory, Associated Universities, Inc., P.O. Box 5000, Upton, Long Island, NY 11973-5000. Equal Opportunity Employer m/f/d/v.

bnl BROOKHAVEN
NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

at the center of science, beside the sea

SENIOR ECOLOGIST

The Department of Biological Sciences is seeking an established scientist in ecology to join the faculty and serve as Director of the Pymaturing Laboratory of Ecology, a field station located 100 miles north of Pittsburgh, which has undergone significant recent renovation. The Laboratory is a residential field station, fully-equipped for research and teaching with field sites, dormitories, faculty cabins, a full dining hall, a library, research buildings, teaching laboratories and lecture hall. A full-time staff of four, including a resident manager, report to the Director who reports to the Department Chair. The Laboratory is fully integrated into the research and teaching programs of the Department. We are seeking a person with a funded research program, a strong teaching record, and good interpersonal skills who will provide leadership for the research and teaching mission of the Laboratory, train graduate students, and participate in undergraduate education. The Department has just hired two additional ecologists and intends to recruit one or two more after this senior appointment. The appointment will be made at the level of tenured Associate or Full Professor and will be available as early as September 1994, subject to budgetary approval. In order to ensure full consideration, applications must be received by January 14, 1994. Applicants should send a curriculum vitae, copies of recent publications, a statement of research interests and future plans, and arrange to have at least three letters of reference sent to:

Dr. William Searcy
Ecology Search Committee
Department of Biological Sciences
University of Pittsburgh
Pittsburgh, PA 15260
(412) 624-4266

The University of Pittsburgh is an Equal Opportunity/Affirmative Action employer. Women and minorities are especially encouraged to apply.

Molecular Biologist/Biochemist Research and Development

United States Biochemical Corporation (USB™), an international leader in the field of Life Science research products and Molecular Biology, is seeking qualified applicants for up to four positions in Molecular Biology Research and Development. Applicants should have at least a B.S. degree in the chemical or biological sciences. Experience is preferred in one or more of the following areas: DNA cloning and sequencing, protein expression, thermophile research, microbiology, enzymology or protein purification.

USB offers competitive salary, benefits and an intellectually stimulating and challenging environment. Interested candidates should submit a resume, including the names and phone numbers of at least two references and a description of skills to:

Human Resources
MD-1
United States Biochemical
Corporation
P.O. Box 22400
Cleveland, OH 44122
EEO Employer M/F/V/H

 **USB**
United States Biochemical

CELL BIOLOGIST

The Department of Plant Biology and the Agricultural Experiment Station at the University of California, Berkeley, has an opening for a tenure-track Assistant Professor (nine months appointment) starting July 1, 1994. Applications are invited from outstanding individuals whose research involves state-of-the-art technology to study fundamental questions in plant cell biology such as intra- and intercellular communication, architecture and function of the cytoskeleton or the extracellular matrix, or structure, function and regulation of other supramolecular complexes in a developmental and cellular context. The successful candidate will be expected to teach in plant cell biology courses at the undergraduate and graduate levels and to develop a strong and independent research program. Applicants must have a Ph.D. and at least two years of postdoctoral experience. A curriculum vitae, a statement of current and future research interests, a statement of teaching experience and interests, and three letters of reference, should be sent by February 1, 1994 to:

Chair, Cell Biology Search Committee
Department of Plant Biology
111 Koshland Hall
University of California
Berkeley, California 94720

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

POSITIONS OPEN

The Department of Physiology and Cell Biology at the University of Texas-Houston Medical School seeks to fill a tenure-track position at the **ASSISTANT PROFESSOR** level in one of the following areas of Cell Biology: extracellular matrix; cytoskeletal elements; growth factors and cytokines. Preference will be given to candidates who take a multidisciplinary approach to studying how these cellular properties impact on physiological and pathophysiological mechanisms. Please send the names and addresses of three references, curriculum vitae, two reprints/preprints and a statement of research interests to: **Chairman of the Search Committee, Dr. Lenard M. Lichtenberger** at March 1, 1994, at the following address: **Department of Physiology and Cell Biology, The University of Texas-Houston Medical School, P.O. Box 20708, Houston, TX 77225. The University of Texas is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

BIOLOGY DEPARTMENT ASSISTANT PROFESSOR, TENURE-TRACK POSITIONS

MICROBIOLOGIST—Ph.D. in Microbiology or related field, postdoctoral experience desirable. Teaching and research in microbiology with additional teaching in microbial physiology, and some general biology.

BOTANIST—Ph.D. in Botany or related field with postdoctoral experience desirable. Teaching of Plant Systematics, Anatomy/Morphology, and some general biology. Prefer research interests in evolutionary/ecological aspects of vascular plants.

ANIMAL PHYSIOLOGIST—Ph.D. in Animal Physiology or related field with postdoctoral experience desirable. Teaching of Animal Physiology, Cell Biology, and some general biology. Research interests in Animal Physiology preferred.

ZOOLOGIST—Ph.D. in Biology with postdoctoral experience desirable. Teaching in Vertebrate Biology, Ornithology, Mammalogy, and some general biology. Research interests in terrestrial birds and/or mammals preferred.

Send curriculum vitae and 3 reference letters to: **Department of Biology, California State University Northridge, 18111 Nordhoff Street, Northridge, CA 91330-8303** by February 1, 1994.

ASSISTANT PROFESSORS

Two tenure-track positions, August 1994. Seeking Ph.D.'s committed to undergraduate teaching and development of research program involving undergraduates. (1) **ICHTHYOLOGIST-VERTEBRATE BIOLOGIST** to teach animal biology, ichthyology, and vertebrate natural history. (2) **BOTANIST** with molecular biology/biotechnology training to teach general biology for nonmajors and specialty. Applications must be received by **February 4, 1994**. Send application letter stating teaching/research interests, curriculum vitae, undergraduate and graduate transcripts, up to 3 significant publications, and 3 reference letters: (List Position) **Search Committee, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004. Internet: BIOLSRCH@UWEC.EDU. Telephone: 715-836-4166. FAX: 715-836-2380. UWEC is an Affirmative Action/Equal Opportunity Employer. Applications from women and persons of color are particularly welcomed.**

DIRECTOR OF RESEARCH (M.D. or Ph.D.) METROHEALTH MEDICAL CENTER (a teaching hospital of Case Western Reserve University School of Medicine.) New position created for individual responsible for coordination of all research programs. Duties include: develop and implement research strategic plan, allocate research space in new, 80,000 square foot building, assist development of departmental research programs, recruitment and allocation of hospital research funds. Active research in area of personal interest and experience expected. Candidate's research focus is open; those with expertise in Molecular or Structural Biology particularly encouraged. Patient care activities not required. Appointment with appropriate academic rank awarded at Case Western Reserve University. Must have proven record of experience in directing research programs and continuing national funding. Send curriculum vitae to: **John J. Moore, M.D., Search Committee Chair, Department Pediatrics, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, OH 44109-1998. An Equal Opportunity Employer.**

POSITIONS OPEN

Biology—two positions: DEPARTMENT CHAIR and ASSISTANT PROFESSOR. One position in molecular genetics; the other in organismal biology with specialization in biophysics, anatomy, development, endocrinology or related areas. Chair will be appointed at a rank appropriate for the candidate's experience. Submit curriculum vitae, three letters of recommendation, and statements of teaching philosophy and professional interests to: **John D. Shepherd, Biology Department, College of Liberal Arts, Mercer University, Macon, GA 31207** by January 7, 1994. *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

BOTANIST:

The Department of Biology at the University of Colorado at Denver seeks applicants for an **ASSISTANT PROFESSOR** tenure-track position to begin August 1994, if the position is funded. Postdoctoral and teaching experience are desirable. A commitment to quality teaching and research is essential. Teaching responsibilities consist of two courses a semester, including field botany and possibly part of general biology. Research should include a field component. Send résumé, representative reprints, outlines of teaching and research plans, and three letters of recommendation to: **Botany Search, Department of Biology, University of Colorado at Denver, Campus Box 171, P.O. Box 173364, Denver, CO 80217** by January 1994. *The University of Colorado at Denver is an Equal Opportunity/Affirmative Action Employer. Alternative formats of this ad are available upon request.*

LYLE C. DICKMAN ENDOWED CHAIR FOR PLANT IMPROVEMENT UNIVERSITY OF FLORIDA

The University of Florida is seeking an experienced scientist who will conduct an innovative program in the area of plant genetics. The candidate must be internationally recognized in plant genetics, must have a demonstrated ability to obtain external funds and to attract and work with outstanding graduate and postdoctoral students. Research results will be useful, in the long term, to tomato genetics. It is anticipated that the successful candidate will interact with others at the University of Florida with interests in plant molecular biology/genetics as well as those engaged in plant breeding. Persons with skills, experience and a track record in modern molecular or cellular genetics are especially encouraged to apply. Letters of nomination should be submitted by **January 1, 1994**, to: **Dr. Daniel J. Cantliffe, Dickman Chair Search Committee, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611-0690**. Applications including a résumé and names of five referees, will be accepted until **February 1, 1994**. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DIRECTOR FOR RESEARCH: Geriatric Research, Education and Clinical Center (GRECC)—The Seattle Veterans Affairs Medical Center, the Division of Gerontology and Geriatric Medicine, Department of Medicine and the Department of Pharmacology at the University of Washington are jointly recruiting a full-time, non-clinical faculty member (M.D. or Ph.D.) at the associate or full professor level, commensurate with qualifications. Major responsibilities for this directorship include: (1) coordinating the research programs of 12 independent Ph.D., M.D., or M.D./Ph.D. investigators at the Seattle and American Lake VAMC GRECC; (2) continuing one's own established aging-related research program focused in neurobiology, neuroendocrinology, molecular pharmacology, or related discipline; (3) monitoring the scientific development of trainees in geriatrics/gerontology; and (4) promoting the interests of the GRECC locally and nationally. The incumbent will participate in the recruitment of 2 to 3 additional M.D. and Ph.D. principal investigators to the program and will occupy newly renovated research space at the Seattle VAMC. Interested individuals should send curriculum vitae and letter of interest to: **Itamar Abrass, M.D., Chair Search Committee, Harborview Medical Center, 325-9th Avenue (ZA-87), Seattle, WA 98104-2499**. The closing date for application is December 31, 1993. *The VA and University of Washington are Affirmative Action/Equal Opportunity Employers. Women and minorities are encouraged to apply.*

POSITIONS OPEN

TENURE-TRACK POSITION ASSISTANT/ASSOCIATE PROFESSOR BIOCHEMISTRY

Albany College of Pharmacy, an *Equal Opportunity Employer*, invites applications for a tenure-track position in Biochemistry. A Ph.D. with at least one year of postdoctoral experience or the equivalent is required. The successful applicant must exhibit a keen interest in independent scholarship, guiding undergraduates in research, and a strong commitment toward innovative teaching. Send résumé and three letters of recommendation before December 20, 1993, to: **Martha Hass, Ph.D., Chair: Biochemistry Search Committee, Albany College of Pharmacy, 106 New Scotland Avenue, Albany, NY 12208.**

CHAIRPERSON AND PROFESSOR. The East Carolina University School of Medicine invites nominations and applications for the position of Professor and Chairperson of the Department of Physiology. The candidate should possess a distinguished record in teaching and research in physiology or related discipline, proven skills in leadership, and experience in administration. Applicants should have an M.D. or Ph.D. degree. Salary and benefits are nationally competitive. Interested parties should submit curriculum vitae and three references to: **Alvin Volkman, M.D., D.Phil., Chairman; Physiology Search Committee; Brody 2W-33; East Carolina University School of Medicine; Greenville, NC 27858-4354**. Closing date: January 31, 1994. *East Carolina University School of Medicine is an Equal Opportunity/Affirmative Action Employer. Federal law requires proper documentation of identity and employability prior to final consideration for this position.*

CHAIR, DEPARTMENT OF BIOLOGY. Clarkson University seeks applications and nominations for the position of Chair of the Department of Biology. Applicants should be interested in leading the growth of a department with a strong undergraduate major and a cooperative graduate program with the Department of Chemistry. Opportunities exist for the development of both undergraduate and graduate programs with the Departments of Chemical Engineering and Civil and Environmental Engineering. The successful candidate will be expected to be a strong leader in the area of faculty hiring and development in support of the University's commitment to excellence in teaching and faculty scholarship. Clarkson is a technologically oriented university with 2400 undergraduates and 350 graduate students, majoring principally in engineering, science and management. The University is located in a small upstate New York town near the Adirondack Mountains with three other institutions of higher education within a 10-mile radius. Candidates should submit a résumé, statement of leadership philosophy and the names of at least three references to: **Dr. A.E. Linkins, Vice President for Academic Affairs, Box 5800, Clarkson University, Potsdam, NY 13699-5800**. The Committee will begin reviewing applications on December 1, 1993, and continue until the position is filled.

Clarkson University is an Equal Opportunity/Affirmative Action Employer. Position number 547.

CHAIR, DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF WISCONSIN MEDICAL SCHOOL MADISON, WISCONSIN

The University of Wisconsin Medical School, Madison, is continuing its search for a chairperson for the Department of Pharmacology to succeed **Professor Lowell Hokin**, who has provided 25 years of strong leadership. We seek a person who is able to give outstanding scientific, academic and administrative leadership to all aspects of the department. Send reply with curriculum vitae to: **Professor Richard Moss, Chair of the Search Committee, c/o Margie Martin, 1205 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706**. To ensure full consideration, applications must arrive by December 31, 1993.

Unless confidentiality is requested in writing, information regarding applicants must be released upon request. Finalists cannot be guaranteed confidentiality. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

3-Dimensional Pharmaceuticals, Inc., a new company integrating cutting edge technologies in Structure-Based Drug Design, Combinatorial Chemistry, and Computer Modeling to discover breakthrough pharmaceuticals, seeks individuals with outstanding qualifications in the following areas:

- **MEDICINAL CHEMISTRY** – Positions available at all levels for individuals experienced in peptido-mimetic libraries, combinatorial synthesis, or structure-based pharmaceutical design.
- **X-RAY CRYSTALLOGRAPHY** – Positions available for individuals with demonstrated capability in protein crystallization, data collection, structure determination, refinement, and structure-based pharmaceutical design.
- **COMPUTATIONAL CHEMISTRY** – PhD Positions are available for specialists in homology modeling, bioinformatics, quantum chemistry, databases, and conformational analysis.
- **PROTEIN PRODUCTION** – Positions available for PhD and MS Molecular Biologists and Protein Chemists with expertise in protein engineering, expression and purification from bacterial and baculovirus systems.
- **ENZYMOLOGY** – Positions are available at PhD and MS levels to develop high throughput assay systems, perform kinetic characterizations, and support protein production.

3DP is located in the greater Philadelphia area and offers a comprehensive compensation and benefits package. Qualified individuals are invited to send a resume with contact data for three references to: 3-Dimensional Pharmaceuticals, Inc., c/o X-61, P.O. Box 2045, Philadelphia, PA 19103.



**3-Dimensional
Pharmaceuticals, Inc.**

AN EQUAL OPPORTUNITY EMPLOYER

TENURE-TRACK POSITION IN THE BIOPHYSICAL SCIENCES AT THE NATIONAL INSTITUTES OF HEALTH BETHESDA, MARYLAND

A tenure-track position is available for an experimentalist to establish an independent research program in the Laboratory of Chemical Physics, NIDDK, NIH. Research in this Laboratory is primarily concerned with problems in the structure, dynamics, and function of biological macromolecules. A variety of state-of-the-art techniques are currently employed in these investigations, including multi-dimensional nuclear magnetic resonance spectroscopy, Raman and infrared spectroscopies, and time-resolved optical spectroscopy with nanosecond and picosecond lasers. There is also a major effort in theoretical studies to complement the experimental work, including both analytical methods and the use of high speed computers.

The Laboratory is located on the main intramural campus of the NIH in Bethesda, Maryland, just outside Washington, D.C. The Senior Scientists in the Laboratory are: Ad Bax, Edwin D. Becker, G. Marius Clore, William A. Eaton, Angela M. Gronenborn, William A. Hagins, James Hofrichter, Ira W. Levin, Attila Szabo, and Robert W. Zwanzig.

Interested applicants should send a Curriculum Vitae and list of publications, copies of major publications, a summary of research accomplishments, a plan for future research, and arrange to have three letters of reference sent to:

**William A. Eaton, Chief
Laboratory of Chemical Physics
National Institutes of Health
Building 5, Room 104
9000 Rockville Pike
Bethesda, MD 20892**



Deadline for receipt of applications is January 3, 1994.

NIH is an Equal Opportunity Employer

George Mason University

The Department of Geography and Earth Science (GESS) and the Institute for Computational Sciences and Informatics (CSI) invite applications for a senior faculty appointment. We seek an innovative, interdisciplinary scientist interested in developing joint research opportunities with GESS and CSI faculty who have already begun to explore global change issues.

The ideal candidate will have extensive experience in computational techniques and modeling with applications to earth systems sciences and global change. The specific area of research is open.

We especially encourage applicants with specialization in computer modeling of atmospheric, biospheric, climatological, geomorphologic, oceanographic, or hydrologic processes. For example, possible successful candidates include: an expert in environmental processes modeling employing remotely sensed data, or an expert in the application of geographic information analyses to global change issues.

Only senior faculty will be considered for this position. Candidates should have a well-defined program of research and be able to demonstrate the capacity to provide research leadership and gain external funding; they should also demonstrate an ability for high quality graduate teaching.

George Mason is a rapidly growing state university in the metropolitan Washington DC area, convenient to funding agencies and major government and industry facilities. Candidates for this position should submit a letter of application detailing experience, a curriculum vitae, and names of three references. Review of applications will begin December 15, 1993. No application will be considered beyond May 15, 1994.

George Mason University is an Affirmative Action/Equal Opportunity Employer. We strongly encourage women and minority candidates to apply for this position. Availability of the position depends on budgetary approval.

Applications should be sent to: Dr. Deborah A. Boehm-Davis, Chair, CSI/GESS Search Committee, Mail Stop 3A2, George Mason University, Office of the Provost, 4400 University Drive, Fairfax, VA 22030-4444.

UNIVERSITY OF MICHIGAN MOLECULAR GENETICS OF PROTEIN FOLDING

The Institute of Gerontology and the Department of Biological Chemistry announce the availability of joint tenure-track faculty positions to investigate protein folding, assembly and trafficking by modern molecular genetic, biochemical or biophysical approaches. We are most interested in individual with established research in the general area of protein folding mechanisms in vivo or in vitro; and individuals whose research focuses on folding and assembly of motion-facilitating molecules in skeletal muscle. Each successful candidate is expected to develop a vigorous, independent research program and to participate in undergraduate/graduate teaching in Biological Chemistry. The University of Michigan provides an excellent research environment as well as competitive salary and fringe benefits.

Applications should include curriculum vitae, list of publications, summary of past research and statement of plans for future work, as well as the names, addresses, telephone and fax numbers of at least three individuals who may be contacted as references. Completed applications should be sent to:

Dr. Ari Gafni
Chair of the Search Committee
University of Michigan
Institute of Gerontology
300 N. Ingalls
Ann Arbor, MI 48109-2007

Review of the applications will begin in December 1993 and continue until suitable candidates are identified. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The CINCINNATI MUSEUM OF NATURAL HISTORY seeks a **CURATOR OF VERTEBRATE PALEONTOLOGY** to establish an active research program, oversee the Museum's fossil vertebrate collections, and contribute to educational programs and development of exhibits. Salary and curatorial level are negotiable. Museum experience and an exceptional record of research and funding are desirable. Send statement of research interests, reprints, curriculum vitae, and three letters of recommendation by 28 January 1994 to: **Dr. Nigel Hughes, Cincinnati Museum of Natural History, 1720 Gilbert Avenue, Cincinnati, OH 45202. FAX: (513) 345-8501. An Equal Opportunity Employer.**

DIRECTOR

The Moss Landing Marine Laboratories (MLML) invites applications for the position of Director. Responsibilities include administering the academic and research programs, coordinating faculty and student affairs, fostering and participating in the instructional program, maintaining an active research program, and encouraging the education and research activities of faculty and students. Currently, MLML is housed in temporary facilities; the Director will be instrumental in the reconstruction process.

The Director should be a distinguished scientist of international reputation, eligible for tenure, with broad interests in the marine sciences, a Ph.D., a notable record of academic achievement, administrative expertise, and a demonstrated potential to provide effective management and leadership. Familiarity with UNOLS ship operations is desirable.

Submit curriculum vitae, names of three references, recent publications/reprints, and other information as may be appropriate. Review of applications begins January 15, 1994, and a decision is expected by May 1, 1994, with a starting date of August 24, 1994 (or earlier). **Dr. Kenneth R. Rebman, Chair, Moss Landing Marine Laboratories Governing Board, P.O. Box 450, Moss Landing, CA 95039.**

Detailed position announcements from MLML at the above address or call 408-755-8650 or Email: **JOHNSTON@MLML.CALSTATE.EDU.**

SJSU/MLML is an Equal Employment Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

Department of Neuroscience

The Johns Hopkins University School of Medicine

Applications are invited for full-time, tenure-track faculty positions. Preference will be given to applicants with broad interests in cellular, molecular, and developmental neuroscience. Applicants should have a Ph.D. or M.D. and appropriate postdoctoral training. Faculty members are expected to establish active independent research programs and participate in teaching graduate and medical students.

Please send curriculum vitae, a brief description of current and future research interests, and arrange to have three letters of recommendation sent to: **Solomon H. Snyder, M.D., Search Committee, Department of Neuroscience, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205.**

An Equal Employment Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

Applications are invited for faculty positions in Biochemistry, Physiology, and Microbiology/Immunology. Principal duties involve the teaching of first- and second-year osteopathic medical students in a curriculum utilizing a systems approach. The individual will also be expected to develop a research program independently or in collaboration with other investigators. Individuals with evidence of excellence in teaching and/or independent research funding will be given priority. Rank is open based upon qualifications and experience. Review of applications will begin immediately and will continue until the positions are filled. Submit a letter of application, curriculum vitae, and the names and addresses of at least three references to: **Silvia Ferretti, D.O., Vice President of Academic Affairs and Dean, Lake Erie College of Osteopathic Medicine, 1858 West Grandview Boulevard, Erie, PA 16509. LECOM is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

BIOLOGY/MOLECULAR, SEARCH EXTENDED: Monmouth College of Illinois for September 1994, **TENURE-TRACK POSITION.** Candidates should have a strong interest in molecular biology, be prepared to teach molecular biology, cell biology, cell physiology, microbiology and a general education course in biology. Supervision of senior research expected. Ph.D. required, liberal arts experience as student or faculty highly desirable. Application including curriculum vitae, three letters of recommendation, undergraduate/graduate transcripts by January 31, 1994, to: **Dr. William B. Julian, Dean of the College, Monmouth College, Monmouth, IL 61462. Women/minorities strongly encouraged to apply.**

ANATOMICAL SCIENCES. Mercer University School of Medicine is seeking applicants to fill a **TENURE/TENURE-TRACK POSITION** in the anatomical sciences, e.g., gross anatomy, microscopic anatomy, neuroanatomy or pathology. Applicants should possess a Ph.D. and/or M.D. with extensive teaching experience in a medical school. The successful candidate will participate as a tutor in a problem-based curriculum. Duties will also include coordination of all visual learning activities in the two-year pre-clinical curriculum. Preference will be given to candidates with demonstrated experience in the development and use of alternative instructional methodologies. Opportunities exist for collaborative research. Applicants should send curriculum vitae, names of three referees, and a letter describing their goals to: **Dr. Robert J. Moon, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA 31207. An Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.**

UNDERGRADUATE LABORATORY INSTRUCTOR IN BIOLOGICAL CHEMISTRY. The Chemistry Department at Washington University in St. Louis is seeking a Ph.D.-level candidate with research experience in biological chemistry to develop and implement integrated laboratory experiments for undergraduate-level chemistry courses as part of a Howard Hughes-funded program. Interested candidates should send curriculum vitae, three letters of reference, and a statement describing their views on undergraduate education in chemistry and biology to: **John-Stephen Taylor, Department of Chemistry, Campus Box 1134, Washington University, 1 Brookings Drive, St. Louis, MO 63130-4899.** Applications will be reviewed after January 15, 1994. *Washington University is an Equal Opportunity/Affirmative Action Employer.*

COLUMBIA UNIVERSITY

The Division of Molecular Oncology, in the Department of Pathology, seeks candidates for a **JUNIOR FACULTY POSITION** to conduct research projects on the molecular pathogenesis of human lymphoid malignancies. Candidates should have at least three years of postdoctoral training with extensive experience in the areas of molecular genetics and biochemistry. *Columbia University takes Affirmative Action to ensure Equal Opportunity.* Applications, including curriculum vitae and the names of three references, should be sent to: **Dr. Riccardo Dalla-Favera, Columbia University, Department of Pathology, 630 West 168th Street, New York, NY 10032.**

ASSISTANT RESEARCHER UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Physiology and Biophysics, University of California, Irvine, is recruiting for a faculty position at the Assistant Researcher level. The candidate should have expertise and a publication record in the biochemistry and molecular physiology of skeletal and cardiac muscle contractile proteins with a focus on myosin isoforms. Specifically, the candidate should have previous experience in muscle plasticity using the animal models of hindlimb suspension, chronic energy deprivation, and systemic hypertension. The technical skills required for this position include RNA and DNA purification, Northern and Slot Blot analyses, Western and Southwestern analyses, nuclear run-on techniques, and gel electrophoresis skills. We will begin considering applications October 1, 1993, until the position is filled. Send curriculum vitae, a brief research description, and the name of three referees to: **Kenneth M. Baldwin, Ph.D., Department of Physiology and Biophysics, University of California, Irvine, CA 92717.**

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

POSITIONS OPEN

ENVIRONMENTAL TOXICOLOGY FACULTY POSITION, DUKE UNIVERSITY. The School of the Environment seeks applicants for a tenure-track or tenured faculty position in environmental toxicology. Preference will be given to applicants at the junior level, but applications from outstanding individuals with established research programs are also encouraged. The successful applicant is expected to develop a nationally recognized, externally funded research program, and to teach and advise graduate-level research and professional students. Training and/or experience in the application of molecular biological techniques to the effects of contaminants in aquatic, marine or terrestrial ecosystems are especially desirable. Applicants should send curriculum vitae, statement of research and teaching interests, and three letters of reference. All materials and requests for information should be directed to: **Dr. Richard T. Di Giulio, Chair, Environmental Toxicology Search Committee, School of the Environment, Duke University, Durham, NC 27708-0328.** Applications will be accepted through December 31, 1993, or until a suitable candidate is identified. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in molecular oncology. Individual will study human melanoma at the level of specific genes controlling cell growth and differentiation. Background in molecular biology preferred. Send curriculum vitae, list of publications and 3 letters of recommendation to: **Alban J. Linnenbach, Ph.D., The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer.**

POSTDOCTORAL POSITION in Dr. Mary Lipscomb's pulmonary immunology laboratory to study either the role of antigen presenting cells in the lung in regulating T-cell subset development, or the role and regulation of cytokine expression in lung infection and vaccination models. The position is supported by a National Institutes of Health grant studying lung defenses in opportunistic infections. Candidate must have a Ph.D. or M.D. degree. Experience in cellular immunology is highly desirable. Applications will be accepted until the position is filled but highest consideration will be given to applicants applying by February 1, 1994. Apply at the **Medical Center Human Resources, University of New Mexico, Albuquerque, NM 87131-5023.** Refer to **Job Requisition 1139-93B.** Curriculum vitae must list employment dates by month/year and must be accompanied by a cover letter with an original signature, description of research, reprints, and names of three references. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study regulation of protein kinase C expression by retinoic acid (*JBC* 267:13356). Work includes cloning of PKC regulatory elements, construction of stable transfectants and mechanism/significance of RA-induced PKC nuclear translocation. Experience in molecular biology desirable. Position is open until filled. Send curriculum vitae and names of two references to: **Richard M. Niles, Ph.D., Professor & Chair, Department of Biochemistry & Molecular Biology, Marshall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25755. Marshall University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITIONS—Excellent opportunity available at Thomas Jefferson University to study the structural and functional aspects of its oncogenes and their related genes (*Cancer Res.*, December 1993; *Oncogene*, December 1993; *Oncogene* 8, 1751, 1993; *Cancer Res.* 53, 3449, 1993; *Oncogene* 8, 2167, 1993; *Cancer Res.* 53, 215, 1993; *Cancer Res.* 52, 5833, 1992; *Oncogene* 11, 2335, 1992; *Oncogene* 7, 65, 1992). Ongoing studies are focused on DNA binding, transcriptional activation, role of its genes in leukemias, lymphomas, sarcomas, in signal transduction, cell growth and differentiation. Experience in recombinant DNA techniques or biology is desirable.

Please send curriculum vitae and names, addresses and telephone numbers of three references to: **E. Shyam Reddy, Ph.D., Room 650, or Veena N. Rao, Ph.D., Room 631, Thomas Jefferson University, Blumle Life Sciences Building, 232 South 10th Street, Philadelphia, PA 19107-5541. Equal Opportunity Employer. Smoke-free environment.**

SCIENTIST

Sandoz Pharmaceuticals Corporation is responsible for products that improve the quality of life. Our developments are the result of research conducted by professionals who specialize in many different fields.

The structural biology group is looking for a scientist whose primary responsibility is to maintain a Bruker AMX500 NMR spectrometer. Other duties include preparation of samples, running 1D, 2D and 3D spectra of peptides and proteins.

The selected candidate must possess a MS degree or equivalent in physical chemistry, biochemistry or a related field with 3-5 years of experience in high-resolution NMR spectroscopy. You should be familiar with handling biological samples. Experience in heteronuclear NMR and familiarity with UNIX workstations are desirable.

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey. For prompt, confidential consideration, respond to position #2812DJ. Only those resumes with salary requirements listed will be seriously considered. Forward your resume and salary requirements, in confidence, to:

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Staffing Department
Building 122/3
East Hanover, NJ 07936

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SANDOZ

bringing research to life

Head of Structural Biology Program

Lawrence Livermore National Laboratory (LLNL), one of the nation's leading research and development organizations, has a senior position available in the Biology and Biotechnology Program for an individual to direct and further develop a dynamic and interactive research group in structural biology. This new effort will add a new dimension to our already expanding programs in carcinogenesis, DNA repair, chromatin structure, and genomics. The individual will be expected to lead a group of highly motivated independent investigators, to develop his/her own research effort and to participate in setting up new facilities for high-field NMR and x-ray diffraction. This is a high priority research area for both the Program and LLNL and funds are expected to be available for new facilities, equipment and program expansion.

Candidates must have shown an ability to develop an independent research program and have a strong commitment to collaborative research. The applicant must have demonstrated experience in resolving the structure and function of biological molecules by NMR, x-ray diffraction or other state-of-the-art techniques.

Interested applicants are invited to send their CV including references to Ms. Quincy McClain, Professional Employment Division, Lawrence Livermore National Laboratory, PO Box 5510, L 725, Dept. #AJSCC33QM, Livermore, CA 94551. For further information regarding this position call either Dr. Rod Balhorn at (510) 422 6284 or Dr. James Felton at (510) 422 5656. U.S. citizenship preferred. We are proud to be an Equal Opportunity Employer. M F D V.

University of California

 **Lawrence Livermore
National Laboratory**

Post Doctoral Fellow

The National Cancer Institute, National Institutes of Health, Public Health Service, requests applications for a Post Doctoral Fellow located in the Experimental Retrovirology Section of the Medicine Branch, Clinical Oncology Program in Bethesda, Maryland. Salary range is \$28,000 - \$48,000. The National Cancer Institute is an Equal Opportunity Employer.

Qualifications:

1. At least four years practical experience, as demonstrated by scientific publications, in the area of development of antiviral therapy against HIV1 infection using the techniques involved in anti HIV1 drug testing and the determination of antiretroviral mechanism of such drugs.
2. At least four years practical experience in performing and training others in the techniques involved in the isolation and propagation of clinical HIV1 strains from individuals infected with HIV1 receiving antiviral therapy, and determination of genetic and phenotypic properties of such HIV1 strains.
3. At least four years practical experience as a physician, as demonstrated by scientific publications, in the study of cancer immunology using lymphokine induced immunocompetent cells.

All applications should be sent to:

**Robert Wittes, M.D.,
Chief Medicine Branch,
COP, DCT
National Cancer Institute
Building 10, Room 12N212
9000 Rockville Pike
Bethesda, MD 20892**



All applications must be postmarked within 14 days of the date of this publication. All applications should include the following:

- a) Curriculum vitae and bibliography
- b) Cover letter including date and place of birth
- c) C.V. should detail education and training, as well as current residence.

POSITIONS OPEN

POSTDOCTORAL POSITION AVAILABLE. Will participate in the purification and cloning of an endothelial cell receptor for human coagulation factor IX. Send/FAX curriculum vitae and 3 letters of reference to: **Darrel Stafford, Department of Biology, 442 Wilson Hall, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3280; FAX: (919) 962-0597.**

POSTDOCTORAL SCIENTIST—Merck Research Laboratories, a leader in pharmaceutical research, has an immediate opening for a postdoctoral research scientist in the Biological Chemistry Department involving the study of enzyme catalyzed post translational modification of initiation factors for protein translation. The position requires a Ph.D. in biochemistry or a related field, and experience in enzyme purification and mechanistic studies. Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter including a brief statement of research interests and the names of three references to: **Personnel Manager, Ad #D-22, MRL Human Resources WP42-2 Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. Equal Employment Opportunity/Affirmative Action/V/Employee.**

POSTDOCTORAL POSITIONS are available to study **MOLECULAR STRUCTURES OF ION CHANNELS AND RECEPTORS** including the nicotinic acetylcholine, GABA_A, and dopamine receptors and the cystic fibrosis transmembrane conductance regulator (*Science* 258:307; *PNAS* 90:6285; *J. Biol. Chem.* 268:21505). Faculty include: **Arthur Karlin, Myles Akabas and Jonathan Javitch.** Please send curriculum vitae, reprints of recent publications and the names of three references to: **Arthur Karlin, Center for Molecular Recognition, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION for molecular biologist to work on an NIH-funded project entailing the *in vitro* or *in vivo* characterization (transgenic mice have been generated) of *cis* and *trans*-acting molecules that determine cell-type specificity and inducibility of a cytolytic lymphocyte specific molecule. Send curriculum vitae and three letters of reference to: **Dr. Mathias Lichtenheld, Department of Microbiology and Immunology, School of Medicine, University of Miami, P.O. Box 016960 (R 138), Miami, FL 33101.**

POSTDOCTORAL POSITION for a **Chemical Ecologist/Plant Physiologist** interested in the chemical basis of seed germination cues. Prefer applicants with familiarity with GC-MS, HPLC, and a desire to combine laboratory and field techniques. Project involves isolation and identification of constituents of wood smoke that stimulate the germination of post-fire annuals. Send curriculum vitae, statement of research interests, addresses and telephone numbers of three references to: **Dr. Ian Baldwin, 109 Cooke Hall, University at Buffalo, SUNY, Buffalo, NY 14260-1300. Telephone: 716-645-3849; FAX: 716-645-2975.**

POSTDOCTORAL POSITION available immediately, to study protein:RNA interactions. Work will focus on RNA recognition by phage T4 regA protein. Research will involve fluorescence quenching assays, RNA and protein purification, cloning and mutagenesis. Send curriculum vitae, description of research experience and names of three references to: **Dr. Eleanor Spicer, Department of Biochemistry and Molecular Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS. Immediate openings to study interfacial enzymology of phospholipases or protein prenylation. Research in the mechanism of catalysis of phospholipases, the regulation of these enzymes in cells, and the design and analysis of inhibitors; other project focused on characterizing the enzymes of the protein prenylation pathway and the role of prenyl groups in the function of ras proteins, rhodopsin kinase, and other proteins. Send curriculum vitae and 2 to 3 letters of recommendation to: **Mike Gelb, BG-10, University of Washington, Seattle, WA 98195. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study genes determining cell type choice in *Dictyostelium*, starting with cDNA clones already isolated by shotgun antisense. A Ph.D. in biological sciences and research experience in molecular biology are required. Please send letter describing background and research interests, curriculum vitae and names of three references to: **Dr. Richard Gomer, Department of Biochemistry and Cell Biology, Rice University, Houston, TX 77251-1892.**

POSTDOCTORAL POSITION INSECT MOLECULAR GENETICS

A postdoctoral research position is available to participate in the genetic, molecular genetic and biochemical investigations of insect transposable elements and to develop transgenic technology for insects of medical and economic importance. A family of short-inverted repeat type transposable elements is being vigorously investigated in drosophilid and non-drosophilid insects (*PNAS* 90:9693). Experience in molecular genetics is essential. Individuals with training and experience in *Drosophila* molecular genetics who are interested in working in the emerging field of non-drosophilid molecular genetics are encouraged to apply. Send curriculum vitae and the names of three references to: **Dr. David O'Brochta, Center for Agricultural Biotechnology, University of Maryland Biotechnology Institute, Room 2115, Ag/Life Science Surge Building, University of Maryland, College Park, MD 20742. Telephone: 301-405-7680, FAX: 301-314-9075.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for studies of immunologic suppressor mechanisms in experimental murine candidiasis. The successful candidate should have a Ph.D. with a strong background in immunology and experience in cell culture techniques. Research offers a unique opportunity for application of basic immunology to solution of a medically important problem. Minimum 2-year commitment required; salary competitive. Submit curriculum vitae and names and addresses of three references to: **Dr. Judith Damer, Department of Microbiology and Immunology, Tulane Medical School, 1430 Tulane Avenue, New Orleans, LA 70112-2699. Tulane University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Available to study photosensitizing merocyanine dyes with antineoplastic, antiprotazoan and antiviral activity (structure-activity relationships, site and mechanism of phototoxicity, structure of dye binding site, applications in bone marrow purging and blood sterilization). Ph.D. or equivalent degree required. Strong background in cell biology and/or biochemistry an asset. We offer modern laboratories on a suburban campus, competitive salary, attractive fringe benefits package, and travel allowance. Starting date: Flexible. Applicants should send curriculum vitae and the names and addresses of three references to: **Fritz Sieber, Ph.D., Midwest Children's Cancer Center, Department of Pediatrics, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226. Equal Opportunity/Affirmative Action Employer, M/F/D.**

POSTDOCTORAL FELLOWSHIP. Available for studies on the molecular basis of cell differentiation and cell lineage. Limited to those with recent Ph.D.'s. Prefer background in molecular biology. *Stanford is an Equal Opportunity Employer through Affirmative Action.* Send curriculum vitae and letters of reference to:

**Frank E. Stockdale, M.D., Ph.D.
Stanford University School of Medicine, M211
Stanford, CA 94305-5306**

TWO POSTDOCTORAL FELLOWS

Opportunities to work on second generation synthetic macrocyclics and helices of members of the Immunoglobulin gene family in a multidisciplinary group specializing in molecular biology, protein chemistry, immunology and structural analysis. Ph.D. in molecular biology, protein chemistry, synthetic chemistry or immunology preferred. Send curriculum vitae and three letters of recommendation to: **Dr. Mark I. Greene, Department of Pathology, University of Pennsylvania, 36th Street and Hamilton Walk, Philadelphia, PA 19104-6082. Funding is available only to U.S. citizens. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION IN EUKARYOTIC GENE EXPRESSION.

Opening for Biochemistry/Molecular Biology/Chemistry graduate (Ph.D./M.S.) to study the molecular basis of cell cycle regulation and stress induction in mammalian cells. Experience in tissue culture, protein biochemistry or transgenic animals desirable. Send curriculum vitae and names of at least two references to: **Dr. Amy Lee, Norris Cancer Center, University of Southern California, School of Medicine, 1441 Eastlake Avenue, Los Angeles, CA 90033.**

MOLECULAR BIOLOGIST SIGNAL TRANSDUCTION

RESEARCH ASSOCIATE POSITION: Highly experienced and productive individual wanted to join a group investigating signal transduction pathways focusing on PKC, raf-ras, lipid second messenger and cell growth regulation. Doctorate required. Must have experience with mammalian cells. Send curriculum vitae, references, and list of publications to: **Dr. Robert M. Bell, Chairman, Department of Molecular Cancer Biology, Duke University, Medical Center, Box 3711, Durham, NC 27710. Deadline for application is December 22, 1993. Duke University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL/RESEARCH ASSOCIATES IN THEORETICAL/COMPUTATIONAL CHEMISTRY/PHYSICS AND EXPERIMENTAL CHEMICAL PHYSICS

Theoretical and experimental quantum control of chemical dynamics. Ultrafast, short wavelength electron and X-ray diffraction as applied to imaging molecular quantum dynamics. Close interaction between experiments, analytic theory and calculations. Looking for exceptionally able (1) theoretical/computational chemists or physicists with strong background in quantum or classical dynamics, quantum control of chemical dynamics or related areas; (2) experimentalists, particularly those with strong background from among molecular beams, charged particle beams, or accelerator physics. **Prof. Kent R. Wilson, Department of Chemistry 0339, University of California, San Diego, La Jolla, CA 92093-0339. Affirmative Action/Equal Opportunity Employer.**

PRINCIPAL MUSEUM SCIENTIST with the Department of Entomology, University of California, Riverside; full-time career position to: (1) manage the Entomology Museum of 1.5 million specimens; (2) manage the quarantine facility for handling introduced entomophagous arthropods for biological control; and (3) develop a research program in systematics and biology of parasitic Hymenoptera (20%) (responsibilities include supervision of two permanent support staff). M.S. in Entomology or related discipline (Ph.D. preferred); knowledge of taxonomy and biology of entomophagous arthropods, with emphasis on parasitic Hymenoptera preferred; experience in curating museum collections. *Hired applicant must show proof of identity and right to work in the United States.* Applicants should send résumé, transcripts, and have four letters of recommendation sent to: **Personnel Department, University of California, Riverside, CA 92521-0314. RE: Principal Museum Scientist Position in Entomology #93-11-001. The University of California is an Equal Opportunity/Affirmative Action Employer.**

PHARMACOLOGIST/MOLECULAR BIOLOGIST/ONCOLOGIST

The Division of Pediatric Pharmacology & Toxicology and the Cancer Institute of New Jersey at the Robert Wood Johnson Medical School of the University of Medicine and Dentistry of New Jersey and Rutgers University are recruiting an M.D. or Ph.D. scientist to explore the unique aspects of cancer in children or the development of new chemical entities to treat cancer in children. Research start-up support will be provided. For further details please write to: **Dr. George Lambert, Division of Pediatric Pharmacology and Toxicology, UMDNJ-Robert Wood Johnson Medical School, One Robert Wood Johnson Place, New Brunswick, NJ 08903. UMDNJ-RWJMS is an Affirmative Action/Equal Opportunity Employer, M/F/D/V, and a member of the University Health System of New Jersey.**

POSTGRADUATE AND POSTDOCTORAL POSITIONS

AVAILABLE IN GENOME ANALYSIS

The Sanger Centre is a new institute engaged in genome research, jointly funded by the Wellcome Trust and the MRC. Part of the work involves large scale sequencing of the genomes of yeast, nematode and human. This will be complemented by computer analysis of genome sequences and mapping studies leading to the identification of genes of biological and clinical importance.

Applications are invited for positions in the following areas:-



Hinxton Hall, Hinxton, Cambs CB10 1RQ
Tel: 0223 834244, Fax: 0223 494919

HUMAN GENOME ANALYSIS — DAVID BENTLEY

- the application of yeast artificial chromosomes to the long range mapping of human chromosomes using hybridisation and PCR-based approaches. Initial studies will focus on regions of the X-chromosome and chromosome 6.

YEAST GENETICS AND YEAST GENOME ANALYSIS — BART BARRELL

- functional analysis of genes using the techniques of yeast genetics
- transcription mapping of yeast chromosomes
- computer analysis of yeast chromosome sequences and establishing a genetic and bibliographic database of yeast genes

INFORMATICS — RICHARD DURBIN/ RODGER STADEN

- genomic sequence analysis
- sequence evolution
- protein sequence comparison and structure prediction
- software to support large scale genomic sequencing and mapping

Candidates should have experience in the appropriate techniques and should supply a full CV including a detailed list of publications, a statement of current and future research interests and the names and addresses of at least 2 referees.

Apply in the first instance to Rachael Jefferies, Sanger Centre, Hinxton Hall, Hinxton, Cambridge, CB10 1RQ, United Kingdom stating clearly the project(s) you are interested in. Applications should arrive not later than 30th December 1993.

PROGRAM LEADER Ovarian Cancer Program

The Department of Internal Medicine and the H. Lee Moffitt Cancer Center and Research Institute at The University of South Florida are seeking a board-certified or board-eligible medical oncologist (M.D. or M.D./Ph.D.) with an active basic research program relevant to ovarian cancer. This individual would serve as Program Leader for the Ovarian Cancer Program within the Cancer Center. The primary time commitments would be to the individual's own laboratory research program and to the organization, leadership, and administration of the Ovarian Cancer program, which also includes significant input into the Cancer Center planning and administration. The clinical commitments would be very modest. This position may be tenure earning.

Send curriculum vitae and a brief statement of major academic interests to Roy H. Behnke, M.D., Chairman, Department of Medicine, University of South Florida and Kenneth S. Zuckerman, M.D., Director, Division of Medical Oncology and Hematology, University of South Florida and H. Lee Moffitt Cancer Center and Research Institute. Address: Office of Faculty Recruitment, H. Lee Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612. Deadline for receipt of applications is January 13, 1994.

The H. Lee Moffitt Cancer Center and Research Institute, adjacent to the Health Sciences Center on the University of South Florida's Tampa campus, includes a modern, dedicated cancer hospital with 162 inpatient beds and ambulatory facilities for adults and children, an expanding 20-bed bone marrow transplantation program, a recently established, high volume screening program, and new basic research and conference facilities.



H. LEE MOFFITT CANCER CENTER
& RESEARCH INSTITUTE
University of South Florida College of Medicine

The H. Lee Moffitt Cancer Center and Research Institute is an Equal Opportunity Employer.
The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action 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 - \$55,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizenship or PRA status may be required

Information and applications:

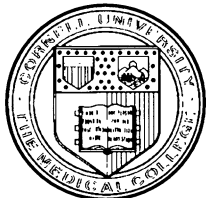
Postgraduate Research Programs
Science/Engineering Education Division
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-7385

POST-DOCTORAL FELLOW

Position open for Scientist with background in molecular biology to join an active group studying the pathogenesis of atherosclerosis using molecular and structural techniques. Opportunities include studies on adhesion molecules, coagulation proteins, viruses, lipoproteins, and signal transduction pathways as they relate to thrombosis and atherosclerosis processes. Position offers excellent opportunity for collaboration within a large group of NIH-funded vascular biologists in the Departments of Biochemistry, Pathology, Pharmacology and Medicine. Fellows will be appointed for a two year term beginning July 1, 1994; stipends will be funded by our on-going NIH-training program in Cardiovascular Biology. Requirements are a Ph.D. or M.D. and U.S. citizenship or permanent residency.

Please send curriculum vitae and names and addresses of three references to: **Dr. David P. Hajjar, Professor of Biochemistry and Pathology, Director, NIH-Training Program, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** Equal Opportunity/Affirmative Action Employer.

**CORNELL
UNIVERSITY
MEDICAL
COLLEGE**



POSITION ANNOUNCEMENT HEAD OF THE DEPARTMENT OF VETERINARY BIOSCIENCES

The University of Illinois College of Veterinary Medicine at Urbana-Champaign is seeking an outstanding academician to provide direction and leadership for the Department of Veterinary Biosciences which includes the disciplines of morphology, physiology, pharmacology, toxicology and nuclear medicine. Candidates must have a DVM and/or Ph.D. degree and a distinguished record of scholarship to qualify for a tenured, professorial position in the Department. Candidates must also have a sensitivity to student concerns and leadership qualifications. Experience in teaching in a veterinary environment is desirable. Administrative skills and a proven record of success in grantsmanship are required as are strong interpersonal skills and a commitment to excellence in teaching, research, and service. Candidates should have experience and an interest in the recruitment and training of graduate students as well as have expertise in one of the discipline areas represented in the department. A background indicating talent for collaborative and interdisciplinary work is desirable. The Head of the Department of Veterinary Biosciences reports to the Dean and interacts with faculty, staff, professional and graduate students, and College- and University-level administrators.

The appointment is 100% time on a 12-month basis with the Department of Veterinary Biosciences. The position is largely administrative, but the incumbent will be encouraged to teach and conduct research in his/her area of expertise. Salary and starting dates are negotiable.

Applicants should submit their professional resumes and the names and addresses of three referees to: **Dr. J.E. Hixon; Chairperson, Search Advisory Committee; Office of the Dean; College of Veterinary Medicine; University of Illinois; 2001 South Lincoln Avenue; Urbana, IL 61801; 217/333-2760.**

In order to ensure full consideration, applications must be received by February 15, 1994.

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

Allelix Biopharmaceuticals Inc. is a Toronto-based biopharmaceutical company focused on therapeutics for bone disorders, inflammation, viral diseases and central nervous system disorders. Our success is based on the energies of creative professionals, advanced technology and solid financial support.

Virologists Manager

We currently seek an experienced virologist to manage a group assessing potential antiviral compounds. Experience with a wide range of viral assays is essential. Expertise in molecular virology would be a definite asset, as would prior industrial experience. The successful candidate will have a Ph.D. and at least 5-10 years of relevant experience.

Research Scientist

We also seek a scientist (Ph.D.) with experience in classic and molecular virology.

Qualified candidates should submit a resume, together with the names and addresses of three references to: **Human Resources, Allelix Biopharmaceuticals Inc., 6850 Goreway Drive, Mississauga, Ontario, Canada L4V 1P1.**

Allelix
BIOPHARMACEUTICALS

FACULTY POSITION MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology of the City University of New York Medical School invites applications for a tenure-track position at the level of Assistant Professor. Candidates are expected to have a Ph.D. or M.D. degree, or equivalent, and to have completed appropriate post-doctoral training with a demonstrated record of significant research accomplishments. Individuals with experience in molecular or cellular immunology, virology, parasitology, or infectious disease will be considered for the position. Teaching responsibilities include medical students, physician's assistants and graduate students.

The Department has strong and diverse research interests and interacts with other University Departments at the Medical School and other CUNY campuses. Faculty have access to a wide variety of state-of-the-art facilities. Funds for initiation of the research program of the successful candidate will be available. Salary range: \$29,931-\$51,254 commensurate with experience.

Interested individuals should send a curriculum vitae, copies of recent publications, a brief statement of future research goals and three letters of reference by Feb. 12, 1994 to: **Dr. Richard Coico, Chairman, Dept of Microbiology and Immunology**



**CUNY MEDICAL SCHOOL
CITY COLLEGE
OF NEW YORK**
Convent Avenue and
138 Street
New York, NY 10031

The City University of New York
is an AA/EEO Employer M/F.

ANIMAL PHYSIOLOGIST

FOREST ECOLOGIST WILDLIFE ECOLOGIST

Department of Biology, seeks to fill three full-time, tenure-track Assistant Professor positions, beginning August 1994, pending budget approval. Department offers undergraduate degrees in Biology and Wildlife/Fisheries; graduate degrees in Wildlife Management, Fisheries Management, and Applied Ecology and Conservation Biology.

Ph.D. required. College-level teaching experience preferred. Successful applicants will demonstrate potential for teaching and research excellence, and willingness to direct undergraduate and graduate research.

ANIMAL PHYSIOLOGIST: teach upper-level course in general/comparative animal physiology and introductory biology courses. Prefer research areas in molecular, developmental, and reproductive physiology with some experience with electron microscopic techniques. (Position #94-360-SCI)

FOREST ECOLOGIST: teach courses in forest science and plant community analysis. Ph.D. in ecology or related area. Strong background in botany and statistics/biometrics required. Demonstrate willingness to collaborate with faculty on conservation biology and natural resource management projects. (Position #94-361-SCI)

WILDLIFE ECOLOGIST: teach courses in wildlife management, wildlife techniques and island biogeography. Prefer experience with large mammals and/or endangered species. (Position #94-359-SCI)

Direct position inquiries to David Morton, Chair, (301) 689-4355/4166, and employment inquiries to Roberta Chamberlin, Assoc. Dir. of Human Resources, (301) 689-4105 (Voice/TDD). Minorities and women are encouraged to apply. Competitive salary. Send letter of interest, vitae, unofficial copy of transcripts, and the names, addresses and phone numbers of three professional references by February 4, 1994 to: FROSTBURG STATE UNIVERSITY, Office of Human Resources, ATTENTION: Position Title (Position #), Frostburg, MD 21532.

AA/EEO



Genetics · Oncology · Virology · Microbiology

Aprogenex develops and intends to manufacture and market diagnostic test systems based on its proprietary DNA probe technology. This RIGHTechnology (Rapid Intact Gene Hybridization Technology) utilizes the Company's chemically manufactured probes and proprietary "cocktail" reagent solution which allows analysis of single intact cells at a molecular level.

We are a publicly held company on the cutting edge of new medical diagnostic tests. We are currently conducting clinical trials for a genetic testing diagnostic which separates fetal cells in maternal circulation and further identifies various chromosomes using our fluorescent DNA probes. Other applications for our probes include infectious diseases, viruses and cancer. We have a number of exciting opportunities within our research organization:

Senior Scientist - requires a Ph.D. in Molecular Biology, Biochemistry, Cellular Biology, Microbiology, Virology or Oncology, 5-7+ years of experience in cytogenetics, molecular biology, genetics, immunology or oncology work, specific work involving DNA probes, plus proven experience planning and directing a research program and supervising technicians. Product development experience is preferred.

Research Associate - requires a B.S. or M.S. in the same scientific disciplines described above, 1-3 years of experience with various aspects of recombinant DNA techniques with proven experience in RNA/DNA methodologies and DNA in situ hybridization. Backgrounds in histology and cytology are a plus.

Aprogenex, Inc.*8000 El Rio St.*Houston, TX*77054*

Attn: H.R. Manager*Equal opportunity employer

REACHING NEW HORIZONS IN MEDICAL DIAGNOSTIC TECHNOLOGY

MARION MERRELL DOW RESEARCH INSTITUTE *Cincinnati Center*

COMPUTATIONAL CHEMISTS

Openings for several computational scientists exist in our Computer Assisted Drug Discovery group. These positions are at the junior and senior Ph.D. levels, although BS/MS level candidates with suitable research experience will also be considered. Successful candidates should possess knowledge and experience in the application of computational and molecular modeling methodologies in conjunction with other disciplines for the design of new drug substances. Candidates with expertise in modeling both small and large molecules are encouraged to apply. Considerable hardware and software (Sybyl, Insight/Discover, Amber, Quanta/Charmm, Explore) are currently in place including complete access to a CRAY supercomputer dedicated to theoretical and structural studies as well as SGI/SUN workstations in the department and in other groups. Ideal candidates should have a dedication to drug discovery and should enjoy working in a collaborative and interactive environment with local and global MMDRI scientists. **JOB CODE: COMP CHEM**

BIOLOGICAL NMR SPECTROSCOPIST

MMDRI is seeking an NMR spectroscopist knowledgeable and experienced in the application of heteronuclear and multi-dimensional NMR experiments. A Ph.D. degree with post-doctoral experience is preferred. The successful candidate will join an interdisciplinary group of scientists comprised of NMR spectroscopists, crystallographers, computational chemists and synthetic chemists. The ideal candidate should have a dedication to drug design in collaboration with local and global MMDRI scientists. The Structural Chemistry group is equipped with state-of-the-art spectrometers and computational tools including a CRAY-YMP supercomputer. **JOB CODE: STRUC CHEM**

Marion Merrell Dow Research Institute is committed to many areas of drug research including immunology, respiratory, oncology, metabolic, ion channel & transporter research, and cerebrovascular & acute neurological disorders. Excellent compensation includes 401(k) and stock options. You will also find an affordable yet cosmopolitan lifestyle in Cincinnati. Please send resume, 2-3 references and salary history to: **Marion Merrell Dow Inc., Human Resources Department/Research Staffing, 2110 East Galbraith Road, Cincinnati, Ohio 45215. PLEASE INDICATE THE APPROPRIATE JOB CODE.**



MARION MERRELL DOW
RESEARCH INSTITUTE

An Equal Opportunity Employer

California Institute of Technology Postdoctoral Fellowships in Earth and Planetary Sciences

The California Institute of Technology announces two fellowships in Earth and Planetary Sciences:

The O.K. EARL POSTDOCTORAL FELLOWSHIP, and The TEXACO POSTDOCTORAL FELLOWSHIP

These awards are from funds endowed by ORRIN K. EARL, JR. and by the TEXACO PHILANTHROPIC FOUNDATION. Each fellowship carries an annual stipend of \$34,000 and offers a research expense fund of \$1,000 per year and one-way travel to Pasadena. The duration of each appointment will normally be for two years, contingent upon good progress in the first year, and beginning with the 1994-95 academic year. Fellows are eligible to participate in Caltech's health and dental program.

These fellowships have been established to support the research of scientists, typically within two years of receipt of the Ph.D. The intent of the program is to identify and support innovative and creative work in the earth and planetary sciences, with particular emphasis on interdisciplinary work. Applicants with training in physics, chemistry, biology or computer sciences are urged to apply. The Caltech faculty is currently active in Geobiology, Geochemistry, Geology, Geophysics, Petrology, Seismology and Atmospheric and Planetary Sciences. It is expected that each fellowship holder will be hosted by a Division professor (designated by the Division Chair) who will contribute to the fellowship support both financially and by providing intellectual guidance.

Application forms may be obtained by writing to Prof. D.J. Stevenson, **Chairman, Division of Geological and Planetary Sciences, Mail Code 170-25, California Institute of Technology, Pasadena, California 91125.**

**COMPLETED APPLICATIONS WITH REFERENCES SHOULD
ARRIVE AT CALTECH BY MONDAY, FEBRUARY 28, 1994.**

Fellowship candidates will automatically be considered for other available postdoctoral positions at Caltech in their fields of interest.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans and disabled persons are encouraged to apply.

POSTDOCTORAL POSITIONS BOSTON UNIVERSITY COLLEGE OF ENGINEERING BIOMEDICAL ENGINEERING DEPARTMENT

Several postdoctoral positions are available through the college, department and individual research programs. The College and Departmental positions are scheduled to begin July 1, 1994 and may be with any of the department's full time faculty in the following laboratories and affiliated Centers.

Biomechanics Research Lab (Ladin)
Fields and Tissues Lab (Eisenberg)
Hearing Research Labs (Carney, Colburn, Hubbard, Mountain, Voigt)
Intelligent Systems Lab (Vaina)
Molecular Engineering Lab (DeLisi, Vajda)
Respiratory Research Labs (Jackson, Lutchen, Stamenovic)
Biomolecular Engineering Research Center (T. Smith)
Biotechnology Center (Cantor, Frank-Kamenetskii, C. Smith)
NeuroMuscular Research Center (De Luca, Merletti)

Send curriculum vitae and the names and addresses of three references by January 1, 1994, to:

H.F Voigt, Ph.D., Chairman
Biomedical Engineering
Boston University
College of Engineering
44 Cummington Street
Boston, MA 02215

An Equal Opportunity Employer



THREE BIOLOGIST POSITIONS

University of North Florida seeks to fill two tenure track positions for Assistant Professor of Biology and a non-tenure track Laboratory Lecturer in Biology beginning in August 1994. For the tenure track positions, a Ph.D. is required, teaching and/or postdoctoral experience is helpful, and the demonstrated ability to conduct meaningful research is essential. The Assistant Professor positions are 1) **TERRESTRIAL ECOLOGIST - BOTANIST** to teach introductory ecology, botany, and an upper level botany course of choice; 2) **MICROBIOLOGIST** to teach introductory microbiology and some combination of immunology, histology, and virology. Successful applicants will also teach in our introductory biology sequence and will be encouraged to procure external funding for research involving undergraduates. A commitment to undergraduate teaching and the ability to involve students in research are essential. The minimum requirement for the **LABORATORY LECTURER** position is a bachelor's degree in biology. Other considerations include teaching experience and advanced degrees. Applicants must be able to teach undergraduate labs, preparing and grading exams, grading lab reports. All applicants send a letter of application, curriculum vitae, undergraduate and graduate transcripts, reprints, and three letters of recommendation to: Joseph A. Butler, Search Committee, Department of Natural Sciences, University of North Florida, Jacksonville, FL 32224-2546. Deadline is January 21. The University of North Florida is an affirmative action/equal opportunity employer.

FACULTY POSITION IN MAMMALIAN MOLECULAR GENETICS

The Department of Biochemistry and Cell Biology, State University of New York at Stony Brook is now focussing its continuing faculty recruitment in the molecular genetics of mammalian development at the junior or senior level. Send curriculum vitae, a summary of research interests, and three letters of recommendation to: Dr. William Lennarz, Chairman, Department of Biochemistry and Cell Biology, State University of New York at Stony Brook, Stony Brook, New York 11794-5215 by March 1, 1994. State University of New York at Stony Brook is an affirmative action/equal opportunity educator and employer.



■ Post Doctoral ■ Fellow

ENVIRONMENTAL SCIENCES

One-year, renewable, post doctoral position available February, 1994. Candidates should have completed all requirements for the PhD or DSc and should have an interest in and experience with theoretical and experimental techniques in microbial ecology and physiology, including experience with electron microscopy, and/or basic techniques of molecular genetics. Send resume, cover letter stating research interests, and have at least three letters of reference sent to **Dr. Joseph J. Cooney, Director, Environmental Sciences Program, UMass-Boston, 100 Morrissey Blvd., Boston, MA 02125-3393.** Evaluations of applications will begin December 29th and will continue until the position is filled. An Affirmative Action, Equal Opportunity, Title IX employer.

**University of Massachusetts
Boston**

POSTDOCTORAL POSITIONS Molecular Biology

The Molecular Toxicology Group of the Health Sciences Research Division at the Oak Ridge National Laboratory (ORNL) has immediate openings for two molecular biology postdoctoral positions in the following areas: (1) investigation of the hyperphosphorylation of tumor suppressor proteins induced by protein kinase-activating promoters and (2) enhancement of lignin- and cellulose-degrading enzyme production using molecular cloning methods in prokaryotic systems.

For the tumor suppressor gene project, experience is needed in protein or enzyme biochemistry and radioimmunoassay methods applicable to the study of protein phosphorylation. Also needed is a familiarity with standard cell culture techniques and kinase systems and a knowledge of recombinant gene expression in eucaryotic systems. For the lignin and cellulase project, experience is needed in prokaryotic molecular cloning methods (other than in *E. coli*) and knowledge of standard protein methods to study recombinant products.

ORNL is managed by Martin Marietta Energy Systems, Inc., for the U.S. Department of Energy. For immediate consideration, send your resume to: Craig Dees, Ph.D., Oak Ridge National Laboratory, Dept. SCI-1210, P.O. Box 2008, Oak Ridge, TN 37831-6109. *ORNL is an equal opportunity employer committed to building and maintaining a diverse workforce.*



IMPERIAL COLLEGE University of London

NERC CENTRE FOR POPULATION BIOLOGY

Postdoctoral Researchers

Three or four postdoctoral positions are available:

1. **A Population Ecologist/Data-Base Analyst** is needed for a collaborative project to compile, analyse and publish a comprehensive data-base of existing population time-series, obtained from published and unpublished ecological studies. Experience in population dynamic theory and computer data-bases is essential.
2. **A Soil Zoologist or Soil Microbiologist** is needed to join a team investigating ecological processes in the Ecotron, a controlled-environment facility. The scientist will investigate the role of soil fauna or microfauna/flora in nutrient dynamics, decomposition processes and community assembly.
3. **A Population Geneticist** is needed for theoretical or experimental studies at the interface of population dynamics and population genetics. The ability to create new research links and, for experimentalists, a training in modern molecular techniques are essential.
4. **A Population Biologist**, with interests in any aspect of population biology or community ecology, is required to expand our team. We seek an outstanding young ecologist with a proven ability to develop and test new theoretical ideas.

Applicants for all posts should have a PhD and relevant research experience.

Contracts are available for 2 years in the first instance.

Salary range £12,828 - £20,442.

Further details are available from Mrs W Wastell, on 0344 294346, at the Centre for Population Biology, Imperial College at Silwood Park, Ascot, Berks SL5 7PY.

Applications by CV to Prof J H Lawton, FRS by: 31st December 1993.

The College is striving to be an Equal Opportunities employer

The National Competition for Student Inventions and Discoveries Is Under Way Now!

The National Invention Center and The BFGoodrich Company are seeking graduate and undergraduate students to compete in the 1994 BFGoodrich Collegiate Inventors Program.

Entry deadline is February 15, 1994.

Thousands of dollars in cash prizes are awarded to winning students and their advisors. The competition recognizes and rewards U.S. college and university students whose innovations and discoveries are deemed the year's most outstanding. Prizes range from \$500 to \$5000.

Call now for details and an application - Contact
Rose L. Heintz, National Invention Center, Akron, Ohio.

1-800-968-4332

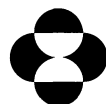
DRUG METABOLISM SCIENTISTS

Two positions are available to work closely with a multidisciplinary team of chemists, biologists and pharmacologists at our Department of Animal and Exploratory Drug Metabolism. The selected candidates will provide essential pharmacokinetic and metabolism data in both exploratory research programs and preclinical ADME studies required for IND submissions.

MASS SPECTROMETRY - to develop LC/MS/MS based analytical methods for the quantitative and qualitative determination of drugs and metabolites in biological fluids. A Ph.D., M.S. or B.S. degree in chemistry, analytical chemistry, biochemistry or another closely related discipline with 3-5 years research experience is required. You should be well versed in all aspects of HPLC separation techniques and have some background in drug metabolism and pharmacokinetics. Demonstrated ability to apply techniques of mass spectrometry to problems of drug quantitation and structure elucidation is desired. A publication record of original research is highly desirable. **Ad #144.**

DRUG METABOLISM - in vivo and in vitro metabolism studies of drugs. An M.S. in chemistry/biochemistry (or a related field) with 1-2 years of research experience, or a B.S. in chemistry/ biochemistry with at least 3 years of research experience or equivalent is required. Some knowledge of drug metabolism with demonstrated strength in modern analytical techniques such as HPLC is desirable. Other desirable experience includes the isolation, purification and characterization of metabolites from biological fluids and handling of radiolabeled chemicals - or - skills in cell culture, organ perfusion, and small animal surgical techniques. **Ad #145.**

Merck Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent. For consideration, send your resume indicating AD # and including the names of three references to **Personnel, Merck & Co., P.O. Box 2000, Rahway, New Jersey 07065, R80-A3.** EE0/AA/VH Employer.



MERCK
Research Laboratories

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

ORIGIN OF THE UNIVERSE...
 FORMATION OF THE EARTH...
 BEGINNINGS OF LIFE...
 EVOLUTION OF THE BIOSPHERE....
 ADVENT OF HOMO SAPIENS...

CSEOL invites applications for five graduate fellowships for 1994-95. In addition to support provided Fellows by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate - travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment - for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution - of the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1994-95 include (1) planetary evolution and exobiology; (2) origin and early evolution of life; and (3) biochemical evolution and molecular phylogeny. Faculty are members of the UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry & Biochemistry, Computer Science, Earth & Space Sciences, Geography, and Microbiology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably, by 21 February 1994) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

CSEOL Fellows Committee
 Geology Building, Room 5687
 University of California, Los Angeles
 Los Angeles, CA 90024-1567
 Telephone: (310) 825-1170
 FAX: (310) 825-0097



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Faculty of Science

LECTURER

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School of Biological Sciences
Reference No: A46/01

The School is seeking a tenurable Lecturer in plant ecology. In cooperation with other academic staff, the appointee will supervise honours and postgraduate research students and teach in undergraduate courses in ecology and plant biology and in graduate diploma courses in environmental and biological sciences.

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Three copies of the application, quoting Reference No, including curriculum vitae, list of publications, and the names, addresses and FAX numbers of at least three and not more than five referees to The Personnel Officer, Personnel Services (K07), The University of Sydney, NSW 2006, Australia (Fax 612 692 4316) **by 20 January 1994.**

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20038

JOHNS HOPKINS
 U N I V E R S I T Y

The Johns Hopkins University Center for Speech Processing seeks a Research Scientist with a minimum of 8 years of experience in the field of Automatic Speech Recognition. The applicants, holder of a Ph.D. degree, should give evidence of original research, should have participated in the development and software implementation of large vocabulary speech recognizers, and must have expert knowledge of C, C++ and UNIX operating systems. Besides carrying out original research and serving as an advisor to Ph.D. students, the Research Scientist will lead an effort to create software facilities enabling experimental evaluation of speech recognition modules. This system will serve as a vehicle for educational projects undertaken by students of speech processing courses. The Research Scientist will also supervise an administrator of a networked system of UNIX workstations.

Applications (including CV's, and the names, addresses, and telephone numbers of three professional references) should be sent to:

Professor Frederick Jelinek, Director
 Center for Speech Processing
 309 Barton Hall
 The Johns Hopkins University
 Baltimore, Maryland 21218-2694

Applications will be accepted until December 31, 1993, or until the position is filled.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Minorities and Women are strongly encouraged to apply.

Dean, School of Engineering and Applied Science, University of Virginia

The University of Virginia invites applications and nominations for the position of Dean of the School of Engineering and Applied Science. The School is composed of nine departments and has 170 faculty, 700 M.S. and Ph.D. students, 1,600 undergraduates and an annual state budget of approximately \$13.5 million. The School has experienced substantial growth in research productivity over the past several years and currently conducts a thriving and diversified \$23 million per year program. The Dean reports to the Vice President and Provost, the chief academic officer for the University.

The University of Virginia has a proud tradition of academic excellence dating back to its founder, Thomas Jefferson. The University is located in Charlottesville, Virginia, at the foot-hills of the Blue Ridge Mountains and approximately 120 miles from Washington, D.C. The University has over 2,000 faculty, 11,000 undergraduates, and 6,500 graduate students.

The preferred starting date for this position is July 1, 1994. Review of applications will continue until the position is filled. Applications must include a curriculum vitae that contains the names and addresses of four references. Inquiries, applications and nominations should be sent to: Dr. James H. Aylor, Chair, Dean Search Committee, Department of Electrical Engineering, Thornton Hall, University of Virginia, Charlottesville, VA 22903-2442; phone: (804) 924-6097.

The University of Virginia is an affirmative action, equal opportunity employer. Women, minorities and persons with disabilities are encouraged to apply.



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The newly established Department of Neurosciences seeks an outstanding candidate to fill a faculty position at the Assistant, Associate, or full Staff level. Applicants must have a Ph.D. and/or M.D. and an active independent research program. Individuals must utilize state-of-the-art cellular and molecular biological techniques to investigate excitable CNS membranes, with the focus on synaptic structure and function, calcium imaging and analysis, and protein-protein interactions. Excellent departmental facilities and generous start-up funds are available. The Department of Neurosciences is housed in the Health Sciences Building, along with the Departments of Cell Biology and Molecular Biology. Opportunities for interaction with clinical Neuroscience departments are plentiful. Candidates should submit a curriculum vitae, a list of publications, a brief statement of research interests, and three letters of reference to: Dr. Bruce D. Trapp, Chairman, Department of Neurosciences - NC30, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.

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Department of Genetics Center for Human Genetics Case Western Reserve University School of Medicine

The Department of Genetics invites applications for several tenure-track positions at the Assistant Professor or Associate Professor rank as part of its continuing expansion. Applicants should have demonstrated expertise and productivity in human genetics, with ability to develop a strong, independent research program. Existing laboratories in the department focus on the genetics of *Drosophila*, *C. elegans*, mouse, and humans. Areas of concentration are in developmental genetics, chromosome structure and function, genome organization and mapping, and the genetics of inherited disease. Expansion of the department, which began in 1992, is supported by significant new resources, including 40,000 square feet of state-of-the-art research space in a new Biomedical Research Building, with generous equipment and start-up funds provided by the Markey Center for Developmental Genetics and by the Center for Human Genetics. Clinical genetics activities are coordinated through the Center for Human Genetics (Dr. S. Cassiday, Clinical Director) and joint appointment in an appropriate clinical department is possible. The Department of Genetics participates in the multidisciplinary Biomedical Sciences Training Program for Ph.D. students. Candidates are expected to participate in the teaching of medical and graduate students. Strong interdepartmental interactions at Case Western Reserve University School of Medicine and University Hospitals of Cleveland are encouraged and provide for an unusually supportive research environment and opportunity for achievement in human genetics.

Applicants should send curriculum vitae, description of research plans, and names of three references (with contact numbers) to: Dr. Huntington F. Willard, Chairman, Department of Genetics, Case Western Reserve University School of Medicine, Cleveland, OH 44106-4955.

Case Western Reserve University is an
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POSITION ANNOUNCEMENT

Head, Department of Veterinary Pathobiology

The University of Illinois College of Veterinary Medicine at Urbana-Champaign is seeking a distinguished scientist to provide leadership for the Department of Veterinary Pathobiology. Candidates must have an outstanding record of scholarship and research to qualify for the position of Professor with tenure in the Department. Qualifications include a proven record of grantsmanship and leadership, a strong commitment to teaching at the professional and/or graduate level, recruitment of graduate students, and strong interpersonal and administrative skills. Aptitude and/or sensitivity to diagnostic medicine is required, as is a record which demonstrates enthusiasm for broad collaboration and interdisciplinary work. Preference will be given to candidates with qualifications including DVM and/or Ph.D. degrees in one of the disciplines represented in the Department. Although the position is largely administrative, the incumbent is expected to teach and conduct research in their area of expertise.

Applicants should submit their professional resumes and the names, addresses, and telephone numbers of three referees to Richard Isaacson, Chair, VP Headship Search Advisory Committee, Office of the Dean, University of Illinois, College of Veterinary Medicine, 2001 South Lincoln Avenue, Urbana, IL 61801. Telephone: 217/333-2760; Fax: 217/333-4628.

In order to ensure full consideration, applications must be received by February 1, 1994.

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

STAFF SCIENTIST THE HEALTH EFFECTS INSTITUTE

The Health Effects Institute (HEI) has an opening for a Review Staff Scientist to assist the Institute's Health Review Committee in managing its peer-review process, to develop commentaries that put the finding of HEI-sponsored research into scientific and public policy context, and to write critical reviews.

Applicants must have: a doctoral degree in biomedical or environmental sciences; postdoctoral research experience; an interest in science management; and excellent writing skills. Experience in respiratory physiology, toxicology, or carcinogenesis is particularly desirable. Send curriculum vitae, a recent writing sample, and the names, addresses and telephone numbers of three references to: **Dr. Kathleen M. Nauss, Director for Scientific Review and Evaluation, Health Effects Institute, 141 Portland Street, Cambridge, MA 02139.** An Affirmative Action/Equal Opportunity Employer



The Health Effects Institute

POSITIONS OPEN

NEUROMUSCULAR DISEASE GENETICS: ASSOCIATE RESEARCH SCIENTIST position available for an expert molecular geneticist (M.D. preferred) to conduct studies on the molecular basis of human hereditary disorders of muscle glycogen metabolism, beginning January 1, 1994. Address inquiries to: Dr. Salvatore DiMauro, Department of Neurology, Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF LAUSANNE: CENTRE PLURIDISCIPLINAIRE D'ONCOLOGIE

In the setting of a high-dose chemotherapy program under protection of peripheral blood progenitor cells, a clinical investigator group is seeking to hire a Ph.D. with the aim of developing a lab associated with the project. Expertise in cell marrow culture absolutely required. Opportunities to have a collaboration with a gene therapy unit. Send curriculum vitae with the names and addresses of 3 references. For further information interested candidates may contact: S. Leyvraz, M.D., Centre pluridisciplinaire d'Oncologie, Niv 10, CHUV, 1011 LAUSANNE, SWITZERLAND. Telephone: 41 21 314 4666. FAX: 41 21 314 3957.

CLINICAL MOLECULAR GENETICIST—Responsible for directing the Molecular Genetics Research Program in an active and growing Pediatric research laboratory at Carolinas Medical Center in Charlotte, North Carolina. Will work with Clinical Genetics faculty to develop genetics research projects and clinical molecular laboratory testing, and will assist other Department of Pediatrics faculty in research projects where appropriate. Must have Ph.D. with clinical molecular genetics laboratory training and/or experience, and be eligible for certification in Molecular Genetics by the ABMG. Carolinas is a tertiary care teaching hospital complex, and the Clinical Genetics Center is an active and growing program with a wide range of genetics services. Contact: Pam Buennemeyer, Allied Health Recruiter, Carolinas Medical Center, P.O. Box 32861, Charlotte, NC 28232-2861 or call 800-942-6898 or (704) 355-2101. *Equal Opportunity Employer.*

RESEARCH ORGANIC POLYMER CHEMIST: \$37,000 per year; 40 hours per week; 8:00 a.m. to 5:00 p.m. Monday thru Friday; Conducts research, analysis, multi-step synthesis, on substances (monomers and polymers) for such purposes as product and process development; prepares standards and specifications for processes, for manufacturing monosized polymer particles, facilities products and tests; requires Ph.D. in Polymer Chemistry and must be familiar with using scientific technology network (STN) data base system; submit résumé or curriculum vitae to: Philadelphia Job Bank, 444 North Third Street, Third Floor, Philadelphia, PA 19123; Job Order Number 4541892.

ANNOUNCEMENTS

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.

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 1994. For information/applications, contact: Lorraine Olendzenski, Planetary Biology Internship, Department of Biology, University of Massachusetts, Amherst, MA 01003-5810. Email: PBI@botany.umass.edu. *An Equal Opportunity/Affirmative Action Institution.*

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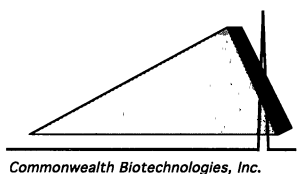
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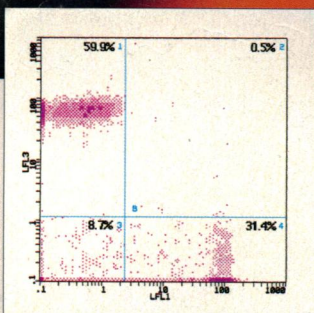
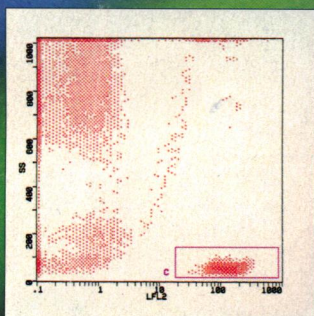
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