



Chemiluminescent Reagent

The "RENAISSANCE" protein immunoblot chemiluminescence reagent makes protein detection faster and more economical than radioactive or chromogen-based methods. The reagent speeds exposure times over other methods through the emission of its intense chemiluminescence signal, which provides a permanent hard copy of data on film. It is stable for 12 months. **Du Pont. Circle 140.**

Digital Imaging Spectrophotometer

ColonyImager is a turn-key digital imaging spectrophotometer that combines the wavelength resolving power of a spectrophotometer with the spatial resolution of a charge-coupled device camera. In minutes, ColonyImager can measure the spectra of hundreds of colonies directly from the surface of a petri dish. Applications include natural products, chemistry, and diagnostics that use either intrinsic pigments or extrinsic colorimetric indicators. ColonyImager is radiometrically calibrated, yielding accurate absorption spectra, reflectance spectra, or fluorescence emission images from 400 to 950 nm. **KAIROS. Circle 141.**

Thermostable DNA Ligase

Ampligase thermostable DNA ligase permits detection of trinucleotide repeat sequences associated with several human genetic diseases. Use of Ampligase for a new technique called repeat expansion detection has enabled scientists to quickly and easily identify and size triplet repeats directly from genomic DNA with-

out prior knowledge of their chromosomal location. The enzyme is highly specific because it lacks activity on blunt-ended DNA. It is extremely sensitive because its thermostability permits amplification during extended thermocycling (even retaining activity after 500 cycles or 16 hours of cycling). **Epicentre Technologies. Circle 142.**

Graphing Software for the Macintosh

KaleidaGraph 3.0 is an upgrade of a data analysis and graphing package for the Macintosh. New capabilities include interface simplification, System 7.x compatibility, and enhanced mathematical functions. The program can handle large data sets (32,000 points per column). Other enhancements include: Excel files and EPSF files can be imported directly; users can store up to 16 curve fits for use on a single plot and extrapolate curve fits to the axis limits; 12 different formats expand the display of date and time data; capability to perform multi-level sorts on data; and user-selectable error bars. **Syn-ergy Software. Circle 143.**

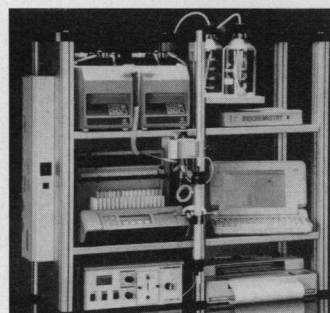
Expression Cloning

Using this enhanced chemiluminescence (ECL) protein immunoblotting system, it is possible to screen cDNA libraries by directly selecting for expressed protein. The construction of cDNA libraries in vectors designed to express protein molecules enables the isolation of individual clones based on the immunological properties of the proteins: By using a horseradish peroxidase-conjugated secondary antibody, positive clones can be selected following detection by luminol-based

ECL. The increased speed of ECL allows colonies or plaques to be identified within 2 hours of the initial blocking step, with average film exposures of 1 min. **Amersham International. Circle 144.**

Low-Pressure Chromatography

ProTech, a low-pressure liquid chromatography system, offers an efficient, flexible, and reliable alternative to more sophisticated systems for purifying biologically active proteins. ProTech automatically generates any composition gradients required by ion



exchange, hydrophobic interaction, affinity and size exclusion chromatography. It can purify from several milligrams up to 100 g of protein. ProTech fraction collection is multi-mode—by peak, time, drop, or manual—with 10 collection windows in any mode. **Gilson Medical Electronics. Circle 145.**

DNA Labeling Kit

The DECAprime II DNA labeling kit for random primer or oligo primed synthesis of high specific activity probes offers improvements in reaction time, convenience, and synthesis of higher specific activity probes. The use of exonuclease-free Klenow polymerase and optimized reaction buffers allows the synthesis of

probes with greater than 10^9 cpm/ μ g with 5-min reaction times and results in probes with higher specific activity. The elimination of exonuclease activity is useful when DNA quantitation is in doubt and the amount of DNA being labeled is not precisely known or less than 25 ng. **Ambion. Circle 146.**

Literature

Cappel Product Guide is a 96-page catalog of immunochemicals and specialty products, including monoclonal antibodies, affinity purified antibodies, conjugated antibodies, and kits. It includes an index of all antibody products by specificity and all specialty products by name, source, and application. **Organon Teknika. Circle 147.**

Radiochemicals 1993-1994 Catalog features 400 ^{14}C - and ^3H -labeled compounds for AIDS, cancer, and other research. It includes a complete structural formula index, storage recommendations, molecular weights, and pricing. **Moravsek Biochemicals. Circle 148.**

1993 ATCC Diskette Catalogue includes sections on bacteria, phages, and media; cell lines and hybridomas; clones, vectors, libraries, and hosts; filamentous fungi and media; protozoa, algae, and media; animal viruses and antisera; plant viruses and antisera; and yeasts and media. The catalog is IBM-compatible and available on 3.5- or 5.25-inch floppy disks. **American Type Culture Collection. Circle 149.**

Immunological Reagents for Industry and Research 1993-94 is a 55-page catalog featuring more than 4000 antibodies and purified biological compounds, including antibodies specific to adhesion molecules, apolipoproteins, collagens, drugs of abuse, therapeutic drugs, infectious agents, tumor markers, hormones, and more. **Biodesign International. 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

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POSITIONS OPEN

NEUROSCIENCE FACULTY POSITION

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

ASSISTANT PROFESSOR, ANATOMY

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

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

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

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

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

BIOLOGY: The Department of Biology at St. John Fisher College invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, to begin in late August 1994. Primary teaching responsibility in anatomy and physiology courses for nursing majors. Development of additional courses is expected in other specialty areas, for biology majors and/or for non-science students. A doctorate in the biological sciences is required. A strong commitment to teaching undergraduates is a must, along with continuing scholarly activity. Please send curriculum vitae, a statement of educational perspectives, and the names, addresses, and telephone numbers of 3 references, by December 1, 1993, to: **Dr. G. Thomas Crombach, Chairman, Department of Biology, St. John Fisher College, Rochester, NY 14618.** *St. John Fisher College is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF PLANT BIOLOGY—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Plant Biology. This is a full-year, tenure-track position in the Section of Plant Biology within the newly reorganized Division and includes an appointment in the Agricultural Experiment Station. A Ph.D. (or equivalent) is required and postdoctoral experience is desirable. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in plant biology with preference for an individual using the approaches of developmental genetics to investigate problems in morphogenesis. Successful candidates will be expected to teach at the undergraduate and graduate level and participate fully in the teaching and advising programs coordinated by the Division of Biological Sciences and Graduate Studies. Candidates should submit curriculum vitae, a statement of current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Tom Rost, Chair, Search Committee, Section of Plant Biology, Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received by November 30, 1993, to be assured full consideration. *The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF MOLECULAR AND CELLULAR BIOLOGY—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Molecular and Cellular Biology. This is a full-year, tenure-track position in the Section of Molecular and Cellular Biology within the newly reorganized Division and includes an appointment in the Agricultural Experiment Station. A Ph.D. (or equivalent) is required and postdoctoral experience is desirable. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in cell biology emphasizing the structure, function, and regulation of supramolecular complexes in a cellular or developmental context. Examples include: chromosomes; cytoskeleton/cell motility; organelles/vesicle trafficking; membrane specialization, such as nuclear pores; or macromolecular assemblies important for development, such as P-granules. The successful candidate will be expected to teach at the undergraduate and graduate level and participate fully in the teaching and advising programs coordinated by the Division of Biological Sciences and Graduate Studies. Candidates should submit curriculum vitae, a statement of their current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Dr. Jonathan Scholey, Chair, Search Committee, Section of Molecular and Cellular Biology, Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received before November 30, 1993, to be assured full consideration. *The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. Applications are invited for a tenure-track position in the Department of Genetics with primary research and teaching interests in the molecular genetics of eukaryotes. Those with research interests in fungal genetics or molecular genetic approaches to cellular and developmental biology are especially encouraged to apply. The candidate will be expected to develop a strong, creative research program and have a commitment to teaching at the undergraduate and graduate levels. The appointment could begin as early as September 1, 1994. Apply before December 5, 1993, by sending curriculum vitae, list of publications, brief statement of research interests and three letters of reference to: **Search Committee, Department of Genetics, University of Georgia, Athens, GA 30602-7223.** *An Equal Opportunity/Affirmative Action Employer.*

Howard Hughes Medical Institute

Postdoctoral Research Fellowships for Physicians

1994 Competition

25 Fellowships will be awarded to physicians by the Howard Hughes Medical Institute for three years of training in fundamental biomedical research. Awards, based on an international competition, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at any academic or not-for-profit research institution, including but not limited to Hughes laboratories.

Fellowship Terms

- Three years of support
- Full-time fundamental research
- \$35,000–\$55,000 annual stipend
- \$15,000 annual research allowance
- \$12,000 annual institutional allowance

Eligibility

- M.D., M.D./Ph.D. M.B.B.S., or D.O., with the first medical degree awarded no earlier than 1984
- At the start of the fellowship
 - at least two years of postgraduate clinical training completed
 - no more than two years of postdoctoral research training completed
- Applicants (and fellows) may not have faculty appointments
- Fellows may not be enrolled in graduate degree programs
- No citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

Schedule

- Application deadline: January 5, 1994
- Awards announced: July 1994
- Fellowships start: September 1, 1994–September 1, 1995

For 1994 Program Announcements and Applications

Howard Hughes Medical Institute
Office of Grants and Special Programs/POST
Department CC94
4000 Jones Bridge Road
Chevy Chase, MD 20815-6789, United States of America
Telephone (301)215-8889

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

POSITIONS OPEN

ANIMAL ECOLOGIST. One 9-month tenure-track faculty position in the Department of Zoology at the **ASSISTANT PROFESSOR** rank. Specialty in community ecology, with strong quantitative and/or modeling skills and field research experience in temperate ecosystems. Ph.D. in Zoology, Animal Ecology, or related field. Detailed position description and other information available upon request. Submit curriculum vitae, transcripts, description of research interests, and 5 letters of reference to: **Chair, Ecologist Search Committee, Southern Illinois University at Carbondale, Carbondale, IL 62901.** Review of applications will begin January 1, 1994, and continue until position is filled. The preferred starting date is August 16, 1994.

SIUC is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSORS UNIVERSITY OF SOUTHERN CALIFORNIA

Applications are invited for two tenure-track positions at the Assistant/Associate Professor level in the Department of Pharmaceutical Sciences, School of Pharmacy. Outstanding candidates with research interests in **Cell Biology, Molecular Biology, Electrophysiology or Biomedical Chemistry** are invited to apply. Applicants must possess a Ph.D. degree in the biological, chemical, or pharmaceutical sciences. Preference will be given to individuals with postdoctoral experience and interest in active participation in a department with research focus on **Drug Targeting and Drug Design.** Participation in team teaching at both the professional and graduate levels are required. Review of applications will begin on December 1, 1993, but applications will be accepted until these positions are filled. Please submit curriculum vitae, selected reprints, a short statement of future research plan, and the names and addresses of three references to: **Wei-Chiang Shen, Ph.D., Search Committee Chairman, Department of Pharmaceutical Sciences, University of Southern California, John Stauffer Pharmaceutical Sciences Center, 1985 Zonal Avenue, Los Angeles, CA 90033-1086.**

Equal Opportunity Employer/M/F/H.

BIOLOGY FACULTY POSITION: Penn State Erie, Behrend College. A tenure-track **ASSISTANT PROFESSOR** position for fall 1994. A strong background in cell and molecular biology with a commitment to undergraduate teaching in introductory biology and advanced molecular biology required. Research interests should include one of the following: development, plant physiology, immunology, or toxicology. Development of an externally funded research program involving undergraduates is expected. Ph.D. required. Postdoctoral and teaching experience desirable. Behrend is a 4-year and graduate college offering the B.S. in biology within the Penn State system. Application deadline is January 15, 1994. Send résumé, transcripts, a brief description of research interests, and arrange that three letters of reference be sent to: **Dr. Roger Knacke, Division of Science, Department Biol-7, The Pennsylvania State University at Erie, Erie, PA 16563-0203.**

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

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

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

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

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

POSITIONS OPEN

BIOLOGISTS

Northeast Missouri State University (NMSU) offers two tenure-track positions at the **ASSISTANT PROFESSOR** level starting August 1994. (1) **DEVELOPMENTAL BIOLOGIST/EMBRYOLOGIST:** Teaching responsibilities include rotation through Embryology/Developmental Biology, General Biology, and either Cell Biology or Genetics. (2) **PLANT POPULATION ECOLOGIST:** Teaching responsibilities include rotation through Ecology, Evolutionary Biology, and General Biology. Teaching and research are mutually supportive activities at NMSU; candidates for these two positions should be strongly committed to both teaching and the development of research programs involving undergraduates and M.S. students. Laboratory space and start-up funds will be provided.

VISITING ASSISTANT PROFESSOR OF BIOLOGY: A full-time, non-tenure-track teaching appointment (pending approval) for a broadly trained biologist to teach General Biology to non-majors and/or majors starting August 1994. This position may be renewable for up to 3 years.

The mission of Northeast Missouri State University, the state's public Liberal Arts and Sciences University, is to provide an outstanding education to an academically talented student body while remaining economically accessible. Northeast is committed to challenging and supporting students in their learning, and encourages the use of active learning methodologies in the classroom, in advising sessions, and in collaborative research with students.

Candidates for all positions should possess a Ph.D. *Women, minorities, the disabled, and veterans are particularly encouraged to apply as NMSU seeks to culturally broaden and diversify both faculty and student bodies.* Send a cover letter indicating for which position you are applying, statement of teaching philosophy (Developmental Biology and Plant Ecology applicants should also include statement of research goals), undergraduate and graduate transcripts, and three letters of reference to: **Dr. George Shinn, Biology Search Committee, Division of Science, Northeast Missouri State University, Kirksville, MO 63501. Telephone: (816-785-4597).** Completed applications will be reviewed starting 6 December 1993.

Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

FACULTY POSITIONS IN VIROLOGY AND MOLECULAR IMMUNOLOGY

To strengthen and build the virology and immunology programs, the Department of Microbiology and Immunology at the University of Arkansas for Medical Sciences seeks to fill several new 12-month, tenure-track, state-supported faculty positions at **ASSISTANT** or **ASSOCIATE PROFESSOR**. Although specific fields are not identified, research interests should emphasize molecular immunology or molecular approaches to immunopathology, inflammation, viral pathogenesis, or viral oncogenesis. The applicant must have a Ph.D. or M.D. with postdoctoral experience. The individual will be expected to develop an independent research program and participate in teaching activities within the department's graduate and medical student programs. Generous start-up funds and laboratory space in the newly finished Biomedical Research Building will be provided. Address inquiries, along with curriculum vitae, statement of present and future research interests and the names of three references to: **Marie Chow, Ph.D., Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205.** *The University of Arkansas for Medical Sciences is an Equal Opportunity Employer.*

Biology: Berea College: Tenure-track position in developmental biology/human anatomy at **ASSISTANT PROFESSOR** level beginning September 1994. Ph.D. required, along with demonstrated commitment to undergraduate teaching and ability to involve students in research. Teach advanced courses in Animal Development, Human Anatomy and Physiology (nursing), and other courses for majors and non-majors. *In keeping with the College's non-sectarian Christian tradition and its emphasis on the worth and dignity of all persons, Berea encourages applications from women and members of minority groups.* Submit application letter, curriculum vitae, transcripts, and three letters of recommendation by 3 January 1994, to: **Dr. Ralph Thompson, Biology Department, Berea College, Berea, KY 40404.**

POSITIONS OPEN

ENVIRONMENTAL BIOLOGIST

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning fall 1994 in the Biology Department at Elizabethtown College, a small liberal arts college in southeastern Pennsylvania. The department is seeking someone to develop a young Environmental Science Program and teach related courses, such as aquatic ecology and ecotoxicology. The candidate would be expected to establish internships with industry and government agencies and participate in writing grant proposals for the program. Some involvement in the general biology or core program may be necessary. The candidate should have a Ph.D. in environmental science or related areas of biology, have a strong commitment to undergraduate teaching, and have a desire to develop a research program with undergraduates.

Applicants should submit a letter of application, curriculum vitae, description of research interests, copies of transcripts, and three letters of reference by December 31, 1993, to:

**Mrs. Martha A. Farver-Apgar
Director of Personnel
Elizabethtown College
One Alpha Drive
Elizabethtown, PA 17022**

Affirmative Action/Equal Opportunity.

ASSISTANT PROFESSOR BIOLOGY DEPARTMENT WILLIAMS COLLEGE

The Biology Department invites applications for a tenure-eligible Assistant Professor position in **MOLECULAR GENETICS**, or allied field, to teach genetics and either developmental or cell biology. Successful applicant will teach one course and two laboratory sections, or an equivalent load, per semester, and is expected to establish an independent research program that can attract external funding and involve undergraduates. Research interests might include but are not limited to: signal transduction, molecular immunology, regulation of gene activity or the cell cycle.

Postdoctoral experience and a strong academic research record are required. Please send curriculum vitae, one-page statements of teaching and research interests, and three letters of reference by December 1, 1993, to: **Search Committee, Department of Biology, Williams College, Williamstown, MA 01267.**

An Equal Opportunity/Affirmative Action Employer. Williams College especially welcomes applications from women and minority candidates.

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

BASIC SCIENTIST

A Faculty Research position at the **ASSISTANT PROFESSOR** level is available immediately for a basic scientist in the Department of Surgery at the University of Kentucky Medical Center. Candidates must have a Ph.D. or M.D. with substantial documented expertise in cell/molecular biological studies of nasal/chemosensory tissues, and will be expected to establish and maintain an extramurally funded research laboratory. Experience in all areas of otorhinolaryngology with an emphasis on regulated expression of genetic material, proteins and glycoproteins in nasal and associated chemosensory tissues is desirable but not mandatory. Send curriculum vitae and reference to: **Dr. Raleigh O. Jones, Department of Surgery, UKMC, 800 Rose Street, Lexington, KY 40536.** *The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.*

Neurodegenerative Disease Research

There isn't one drug in the world that alters the course of a brain disease. What biotechnology is trying to do is offer new technologies that will be intervention therapies...so that for the first time we will be able to alter the course of the disease.



Cephalon, Inc.

Cephalon is focused on neuroscience research and the development of breakthrough treatments for neurodegenerative diseases and disorders such as ALS, Alzheimer's and Narcolepsy. Our research strategy focuses on the identification and development of molecules that promote the survival of neurons that are compromised by injury, stroke and degenerative diseases.

PHARMACOLOGISTS/MOLECULAR BIOLOGISTS, Ph.D.

Cephalon is actively recruiting Pharmacologists/Molecular Biologists who have a Ph.D. and a minimum of 2 years post doctoral experience. Three to 5 years related experience preferred. Candidates should have a strong interest and experience in one of the following areas:

- In vivo models of neurodegeneration triggered by calcium overload. **Position Code: SC-1**
- Models of neurodegenerative diseases with emphasis on those responsive to trophic factors. **Position Code: SC-2**
- Models of cognition, experience with behavioral models for the evaluation of transgenic mice, rats or aged animals. **Position Code: SC-3**
- Strong molecular techniques with understanding of mechanisms of gene regulation and the ability to manipulate pharmacologically. **Position Code: SC-4**

NEUROSCIENTIST/NEUROANATOMIST, Ph.D.

This position requires a thorough working knowledge of the neuroanatomical, histochemical, cytochemical techniques used in the evaluation of neural degenerative pathologies in transgenic animals. **Position Code: SC-5**

Candidates for Ph.D. level openings should have a strong record of publications, well-developed communication skills and a demonstrated ability to effectively interact in a multi-disciplinary, collaborative environment.

PHARMACOLOGISTS, MS/BS

Candidates should have 1 to 5 years experience encompassing all areas of neuroscience related to neurodegenerative conditions with specific expertise in stereotaxic and behavioral techniques. **Position Code: SC-6**

Cephalon offers competitive salaries and comprehensive benefits including a 401K and stock participation. Qualified candidates are invited to send their resumes indicating Position Code and salary history to: **Human Resources, CEPHALON INC., 145 Brandywine Parkway, West Chester, PA 19380-4245.** Equal Opportunity Employer, M/F/D/V. Only Direct Applicants will be considered. No Phone Calls Please.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN MICROBIOLOGY

The School of Biological Sciences, University of Missouri-Kansas City (UMKC), invites applications for a tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** of Microbiology in the Division of Cell Biology and Biophysics. Preference will be given to candidates with research interests in **molecular microbiology** emphasizing structural or other biophysical aspects and with application to one of the following systems: eukaryotic viruses, algae, fungi, yeast or other lower eukaryotes. Research interests should be compatible with departmental emphasis in molecular structure and recognition as applied to biological molecules and supramolecular assemblies. We seek an individual with at least two years of postdoctoral training, demonstrated potential to establish independent, extramurally funded research programs and good communication and supervisory skills. Teaching activities will involve participation in the School's doctoral programs, biological sciences undergraduate curricula and health science courses. Competitive salaries, newly renovated research space, start-up funds and excellent core facilities are available. Review of applications will begin December 6, 1993, and continue until the position is filled. Candidates should submit curriculum vitae with summary of present and future research interests and request that three letters of recommendation be sent to: **CBB-MCRB Search Committee, School of Biological Sciences, 5100 Rockhill Road, University of Missouri, Kansas City, MO 64110-2499.**

Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGIST

The Biology Department at Emory University seeks a neurobiologist who uses molecular, cellular, developmental and/or genetic approaches to study fundamental problems in neurobiology. The appointment is at the **ASSISTANT PROFESSOR** level, although an appointment at a higher rank will be considered in exceptional circumstances. Applicants should have two years or more of postdoctoral research experience and provide evidence that they will develop a strong, independent research program. It is anticipated that the appointee will participate in the Graduate Program in Neuroscience and will have teaching responsibilities at the undergraduate level. Please send curriculum vitae, reprints of publications, a statement of present and future research plans and three letters of recommendation to: **Dr. Ronald L. Calabrese, Chair Neurobiology Search Committee, Department of Biology, Emory University, 1510 Clifton Road, Atlanta, GA 30322.** Review of completed applications will begin on January 3, 1994. *Emory University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

CONSERVATION BIOLOGIST. Tenure-track **ASSISTANT PROFESSOR** position available August 1994. Postdoctoral experience and research in plant conservation ecology preferred, especially field or modeling experience complementing our strengths in ecology, genetics and evolution. Responsibilities include establishing an extramurally funded research program, advising Ph.D. and M.S. students, teaching in core biology courses and developing a graduate specialty course. Send curriculum vitae, statement of research/teaching interests, selected reprints, and three letters of reference by December 1, 1993, to: **Dr. R. C. Woodruff, Chair, Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403-0212.** *Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION

ASSISTANT/ASSOCIATE PROFESSOR, tenure-track for July 1994. The candidate should have a strong research program in the area of Cell Biology. The primary teaching responsibility will be in Human Anatomy. Applications must be received by December 1, 1993. The Chicago Medical School is a private institution located 35 miles north of downtown Chicago, in a pleasant, northern lake shore community. This is a modern, well-equipped facility that offers an active and productive research environment. Curriculum vitae and the names of four references should be sent to: **Dr. David McCandless, Department of Cell Biology and Anatomy, University of Health Sciences/The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064.**

UHS/CMS is an Equal Opportunity Employer.

POSITIONS OPEN

ANATOMY/PHYSIOLOGY The Ohio State University at Mansfield

The Department of Zoology is seeking a candidate for a tenure-track **ASSISTANT PROFESSORSHIP** on the Mansfield Campus of the Ohio State University. Teaching duties include undergraduate courses in human anatomy and physiology as well as introductory biology for majors and non-majors. Research specialty is open, but preference will be given to applicants whose research program can be carried out in a regional campus setting with limited laboratory facilities. Applicants should have a Ph.D., a strong commitment to undergraduate teaching and an active research program. The appointment will begin autumn 1994. The successful candidate will join a Mansfield Campus biology faculty composed of a botanist, microbiologist, and zoologist, and will be a non-salaried member of the OSU Department of Zoology on the Columbus Campus. The Mansfield Campus of OSU enrolls 1,500 students and offers the first two years of the Ohio State University's curriculum as well as Baccalaureate and Master's degrees in Education. Graduate faculty members may direct graduate students through the department on the Columbus Campus. Send curriculum vitae, reprints, three letters of reference, and a brief description of teaching and research goals by 29 November 1993 to: **Dr. Tim M. Berra, Chair, Zoology Search Committee, The Ohio State University at Mansfield, Mansfield, OH 44906.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.*

Industry-Funded POSTDOCTORAL and RESEARCH ASSISTANT PROFESSOR POSITIONS are immediately available in the state-of-the-art AgBiotech Center at Rutgers University to study the effect of the rhizospheric microorganisms on heavy metal uptake by plants. Research background in soil microbiology is required as well as excellent communication skills. Minimum starting salaries are \$26,000 and \$35,000 plus health insurance. Send curriculum vitae and three references to: **Dr. Ilya Raskin, AgBiotech Center, Rutgers University, Cook College, P.O. Box 231, New Brunswick, NJ 08903-0231.** *Rutgers is an Equal Opportunity/Affirmative Action Employer.*

POLYMER/MATERIALS SCIENCE ASSISTANT PROFESSOR

The University of Tennessee, Knoxville (UTK), invites applications for a tenure-track Assistant Professor position, effective August 1994, in polymer/materials science with emphasis on synthesis and applications of biopolymers and/or organic polymers. The individual must have a Ph.D.; postdoctoral or industrial experience is highly desirable. Candidates in related areas of organic/polymer chemistry will be considered. Applicants should submit curriculum vitae, including graduate and undergraduate transcripts, a research plan with start-up requirements, and a list of publications. Application materials, as well as three letters of recommendation, should be sent to: **E. L. Wehry, Chair-Search Committee, Department of Chemistry, University of Tennessee, Knoxville, TN 37996-1600.** Evaluation of completed applications will begin on December 1, 1993, and will continue until the position is filled.

UTK is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.

ASSISTANT PROFESSOR, NEUROSCIENCE

A tenure-track position beginning July 1994 in the Department of Neuroscience, University of California, Riverside. We seek an outstanding **developmental neuroscientist**, preferably one using cellular/molecular/genetic approaches, who has a strong commitment to excellence in teaching and research. Ph.D. or equivalent degree required. Postdoctoral experience preferred. It is expected that the successful candidate will develop collaborative relations with existing neuroscience faculty while establishing a vigorous, independent research program. Teaching duties of department faculty include both graduate and undergraduate courses in neuroscience. Application deadline: **15 December 1993.** Applicants should send curriculum vitae, copies of publications, statement of research and teaching interests, and arrange for at least three letters of reference to be submitted to: **Glenn I. Hatton, Chairman, Department of Neuroscience, University of California, Riverside, CA 92521-0146.**

Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MARINE POPULATION/ COMMUNITY ECOLOGIST

Tenure-track **ASSISTANT** or tenured **ASSOCIATE PROFESSOR** position for population/community ecologist with demonstrated excellence in experimental field research in marine and/or estuarine systems. Candidates should have expertise in statistical and/or mathematical aspects of ecology, teach a course in general ecology and an advanced course, and participate in the graduate program in ecology and evolutionary biology. Candidates must have a Ph.D., potential for excellence in teaching, ability to develop an independently funded research program, and potential to interact broadly and productively with faculty in ecology and evolutionary biology. Applicants should submit a résumé including research and teaching experience, future research plans, and a list of publications; and have letters of reference (three for assistant professor, five for associate professor) sent, to be received by 15 December 1993, to: **Dr. D. H. Morse, Department of Ecology and Evolutionary Biology, Box G-W, Brown University, Providence, RI 02912.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSORS OF MICROBIOLOGY

The University of Kansas is seeking outstanding candidates to fill two assistant professor tenure-track positions in the Department of Microbiology beginning fall 1994. Each position is supported in part by the newly established Franklin D. Murphy Scholars in Molecular Biology Endowment. Candidates with postdoctoral experience, whose research interests encompass molecular biology and who have demonstrated creativity and productivity in microbial genetics, virology, or pathogenic microbiology, will be considered. Selected candidates will be expected to develop and sustain a vigorous research program and to participate effectively in the teaching of undergraduate and graduate students. Murphy Scholars will be provided start-up funds and an annual salary supplement and discretionary funds. Applicants please submit curriculum vitae, a brief statement of research interests, and the names and addresses of three references to: **Dr. Clarence S. Buller, Department of Microbiology, University of Kansas, Lawrence, KS 66045.** First consideration will be given to completed applications received by January 31, 1994. *The University of Kansas is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged to apply.*

FACULTY POSITION IN HUMAN GENETICS

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

RESEARCH ASSISTANT PROFESSOR

The University of Maryland, Division of Neurological Surgery is currently recruiting for a Ph.D. with a minimum of one year of postdoctoral experience working with the patch clamp technique to identify calcium channels in vascular smooth muscle cells. This is a full-time position at the Assistant Professor level. Excellent fringe benefit package and salary commensurate with experience. Qualified applicants should submit curriculum vitae and names of three professional references to: **J. Marc Simard, M.D., Ph.D., Associate Professor, Division of Neurological Surgery, Department of Surgery, University of Maryland, c/o Lois Reisig, Department of Surgery, 405 West Redwood Street, 5th floor, Baltimore, MD 21201.** *Affirmative Action/Equal Opportunity Employer. Minorities and females are encouraged to apply.*

The Division of Research Grants of the National Institutes of Health....

Invites inquiries into special employment opportunities as administrators of study sections. Study sections, managed by Scientific Review Administrators, provide the initial review of research grant applications for technical and scientific merit. The Division of Research Grants houses most of the study sections which are responsible for the review of grant applications submitted to the National Institutes of Health.

We are seeking individuals with proven independent research experience in the health-related biological, biomedical, clinical and behavioral sciences. Individuals must have a Ph.D. degree or equivalent. A Health Scientist Administrator Notice of Rating from the Office of Special Examiner, NIH, is required. Further information and qualification requirements can be obtained by contacting the:

**Personnel Office
Division of Research Grants
National Institutes of Health
5333 Westbard Avenue
Room 438
Bethesda, MD 20892
(301) 594-7279**



U.S. Citizenship Required
NIH is an Equal Opportunity Employer

Scientific Programmer

Qualified candidates must have a BS/MS in Biological Science and 3 to 5 years' programming experience in Fortran and C. Experience with UNIX and VMS operating systems and standard sequence analysis packages is required. You will work on the detection of structural motifs in amino acid sequences involving the application and modification of existing software as well as the development of new applications. Familiarity with sequence alignments and 3-D structures of proteins as well as experience with homology modeling and programming of parallel architecture is desired. Knowledge of protein structure will be helpful.

At Amgen Inc., our staff plays an integral role in maintaining the highest of standards and product excellence. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, medical/dental/life insurance plans, on-site fitness and child care facilities and three weeks vacation. If you're qualified for these positions, please FAX/mail your resume and/or curriculum vitae to: **FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code OA-SC-RL-001, Amgen Center, Thousand Oaks, CA 91320-1789.** Please, principals only.

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Postdoctoral Opportunities at Pfizer

The field of pharmaceuticals and health care is more rewarding than ever as new products create a healthier world population. As one of the leaders in this dynamic industry, Pfizer Inc, a Fortune 100 company, is committed to continuing its remarkable growth. Our primary R&D facility is located in a southeastern Connecticut shore community, giving easy access to the well known academic and cultural centers of the Northeast, and offers the attractions of a New England lifestyle.

Currently, the Central Research Division of Pfizer Inc offers two unique postdoctoral positions, each comprising a 3 year appointment that includes 18 months in our laboratories followed by 18 months in an academic laboratory.

Novel Immune G-Protein Coupled Receptors

This study, to be carried out in the Department of Molecular Genetics at Pfizer and at Yale University School of Medicine with Dr. Charles Janeway, will focus on the functional characterization of a newly identified hematopoietic G-protein coupled receptor in transgenic and knockout models. This position requires a PhD in Molecular Biology, Immunology or a related area. Publication of results is expected.

Steroid Receptor Action

This study will seek to elucidate the mechanisms of tissue specific gene activation by steroid/thyroid hormone receptors. The approach will include the identification of genes that are transcriptionally regulated by steroid hormones and steroid hormone analogs. Candidates must have a PhD in Molecular Biology, Biochemistry or related area. Publication of results is expected.

These positions include a stipend, medical and dental insurance, and relocation assistance. To be considered please forward your *curriculum vitae* and the names of three references, indicating position of interest, to: **Mr. Kym Goddu, Employee Resources Associate, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



Central Research
Bringing science to life

POSITIONS OPEN

ASSISTANT PROFESSOR OF NEUROBIOLOGY, PHYSIOLOGY, AND BEHAVIOR—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Neurobiology, Physiology, and Behavior position in the area of animal behavior. This is a full-year, tenure-track position in the Section of Neurobiology, Physiology, and Behavior within the newly reorganized Division and includes an appointment in the Agricultural Experiment Station. A Ph.D. (or equivalent) is required and postdoctoral experience is desirable. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in an area of animal behavior involving physiological mechanisms. The successful candidate will be expected to teach undergraduate and graduate-level courses and participate fully in the teaching and advising programs coordinated by the Division of Biological Sciences and Graduate Studies. Candidates should submit curriculum vitae, a statement of their current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Dr. Peter Marler, Chair, Search Committee, Section of Neurobiology, Physiology and Behavior; Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received by November 30, 1993, to be assured of full consideration. *The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF EVOLUTION AND ECOLOGY—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Evolution and Ecology. This is a full-year, tenure-track position in the Section of Evolution and Ecology within the newly reorganized Division and includes an appointment in the Agricultural Experiment Station. Candidates must have a Ph.D. (or equivalent) in biological science or a related field. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in one or more areas of ecology. Preference will be given to candidates specializing in physiological ecology, behavioral ecology, population ecology, community/food-web ecology, avian ecology, mammalian ecology, or plant ecology. The successful candidate will be expected to teach at the undergraduate and graduate level and to participate fully in the teaching and advising program coordinated by the Division of Biological Sciences and Graduate Studies. Candidates should submit curriculum vitae, a statement of current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Dr. Marc Mangel, Chair, Search Committee, Section of Evolution and Ecology, Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received before November 30, 1993, to be assured full consideration. *The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. The University of California is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS

The School of Biology at Georgia Institute of Technology invites applications for two positions at **ASSISTANT PROFESSOR**. Successful applicants are expected to establish an active program of funded research and be committed to teaching in the B.S. and Ph.D. programs. Areas of research interest are: **molecular genetics** relating to gene regulation or structure/function in a eukaryotic system, and **computational biology** with emphasis on analysis of sequence or structure of nucleic acids and/or proteins. Curriculum vitae, research plans, and three letters of reference should be submitted by December 31, 1993, to: **Faculty Search Committee, c/o Dr. Roger M. Wartell, School of Biology, Georgia Tech, Atlanta, GA 30332.** Georgia Tech is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

EVOLUTIONARY BIOLOGIST: The Department of Cell, Molecular and Structural Biology, Northwestern University Medical School, announces a tenure-track position at the **ASSISTANT PROFESSOR** level. We are particularly interested in individuals who apply molecular, genetic, developmental, functional, or phylogenetic approaches to understanding primate or vertebrate structure and its evolutionary context. The Department is composed of a large and diverse group of researchers working on aspects of modern structural, molecular, cell, developmental, and evolutionary biology. Applicants must be qualified to assist in the teaching of human gross anatomy and participate in the Program in Evolutionary Biology in the Integrated Graduate Program in the Life Sciences. Please send curriculum vitae, statement of research interests, names of references, and representative publications by January 31, 1994, to: **Marian Dagosto, CMS Biology, Northwestern University, 303 East Chicago Avenue, Chicago, IL 60611.**

Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer and invites applications from all qualified individuals. Applications from women and minorities are especially sought.

ASSISTANT PROFESSOR OF MICROBIOLOGY—The Division of Biological Sciences, University of California, Davis, invites applications and nominations for an Assistant Professor of Microbiology. This is a full-year, tenure-track position in the Section of Microbiology within the newly reorganized Division and includes an appointment in the Agricultural Experiment Station. A Ph.D. (or equivalent) is required and postdoctoral experience is desirable. Candidates must have an outstanding record of achievement in research and will be expected to develop a strong research program in an area of molecular microbiology. Areas we are seeking to strengthen include microbial physiology and genetics, and eucaryotic microbiology. The successful candidate will be expected to teach at the undergraduate and graduate levels and to participate fully in the teaching and advising programs coordinated by the Division of Biological Sciences and Graduate Studies. Candidates should submit curriculum vitae, a statement of current and proposed research, and a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: **Dr. Marty Privalsky, Chair, Search Committee, Section of Microbiology, Division of Biological Sciences, University of California, Davis, CA 95616-8519.** Closing Date: Open until filled, but all application materials including letters of recommendation must be received before November 30, 1993, to be assured of full consideration. *The University of California is interested in candidates who reflect the highest standards of scholarship and professional activities and does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, or sexual orientation. The University of California is an Equal Opportunity/Affirmative Action Employer.*

ECOLOGIST

The Department of Zoology, University of Toronto, invites applications for a tenure-track position in **Evolutionary and Behavioural Ecology** at the **ASSISTANT PROFESSOR** level to begin 1 July 1994. Of particular interest are candidates who have a strong theoretical perspective in their research. Their research program should include empirical studies, and preferably be field oriented. The successful candidate is expected to develop a vigorous and internationally recognized research program and to teach conceptually oriented courses at the graduate and undergraduate level. We provide a competitive salary and outstanding research facilities, and the opportunity to work in one of the largest and most diverse ecology programs in North America. Interested applicants with a Ph.D. in a relevant field should send curriculum vitae including FAX number, detailed statements of research and teaching interests, reprints of their 5 most important papers, and three letters of reference to: **Ecology Search Committee, Department of Zoology, University of Toronto, Toronto, Ontario M5S 1A1, Canada.** Applications will be considered beginning 13 December 1993. *In accordance with Canadian immigration requirements this advertisement is directed to Canadian citizens and permanent residents of Canada. In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities.*

POSITIONS OPEN

The Division of Endocrinology and Metabolism, Department of Medicine, School of Medicine, University of Alabama at Birmingham (UAB), announces the availability of a tenure-track **FACULTY POSITION**. Academic rank will be determined by the qualifications of the individual, but an **ASSISTANT/ASSOCIATE PROFESSOR** is being sought. This position is open to an individual having a proven ability to perform independent research, particularly in the molecular biology of cell signalling and gene regulation. An M.D. is preferable. To apply, send full credentials to: **Dr. Jeffrey E. Kudlow, Division of Endocrinology/Metabolism, Department of Medicine, University of Alabama at Birmingham, Birmingham, AL 35294-0012.**

UAB is an Equal Opportunity/Affirmative Action Employer.

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

ASSISTANT PROFESSOR, INVERTEBRATE ZOOLOGY. The Biology Department of Gettysburg College invites applications for a tenure-track position beginning with the 1994-95 academic year. Teaching responsibilities will include an upper-division course in Invertebrate Zoology, additional courses in her/his area of interest, and participation in the first-year introductory biology course. The successful applicant will be expected to develop a research program involving undergraduate students. Candidates must have a doctorate in biology. Postdoctoral experience is encouraged but not required. Gettysburg College is rated as a highly selective liberal arts college. It is located near the Washington/Baltimore area and offers among its benefits a Partner Assistance Program. *Gettysburg College is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.* Submit curriculum vitae, a statement on teaching and research goals, and the names and addresses of three referees to: **Dr. Ralph A. Sorensen, Chairman, Biology Department, Box 392, Gettysburg College, Gettysburg, PA 17325.** (rsorensen@gettysburg.edu; FAX: 717-337-6157). The review of completed applications will begin January 3, 1994, and continue until the position is filled.

TENURE-TRACK FACULTY POSITION—BIOLOGICAL OCEANOGRAPHY

The School of Oceanography at the University of Washington invites applications for a tenure-track **ASSISTANT PROFESSOR** position in biological oceanography. Preference will be given to applicants active in research on upper water-column processes involving phytoplankton or protozoa. Persons pursuing molecular, physiological, and other quantitative approaches are encouraged to apply. Teaching at the undergraduate and graduate levels is expected. Closing date for applications is January 15, 1994. Applicants should send curriculum vitae, a statement of research and teaching interests, a list of publications, recent reprints, and the names and addresses of four persons whom we may contact for letters of reference to:

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

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COLD SPRING HARBOR LABORATORY

1994 SPRING COURSES

EARLY DEVELOPMENT OF *XENOPUS LAEVIS*

April 6-13

Robert Grainger, *University of Virginia*
Hazel L. Sive, *Whitehead Institute*

This course will provide extensive laboratory exposure to the biology and manipulation of embryos from the frog, *Xenopus laevis*. The course is particularly suited for investigators who have a current training in molecular biology and knowledge of developmental biology, but have had no experience with *Xenopus*. Intensive laboratory sessions will be supplemented by daily lectures from experts in both experimental and molecular embryology. Six main areas will be covered: (i) care and handling of adults and embryos, (ii) stages of embryonic development and anatomy, (iii) whole mount *in situ* hybridization and immunocytochemistry, (iv) microinjection of eggs and oocytes, (v) micromanipulation of embryos, and (vi) induction assays. Guest lecturers have included J. Gerhart, B. Harris, R. Keller, M. Wickens and M. Whitman.

Tuition, Room and Board....\$1,225

CLONING & ANALYSIS OF LARGE DNA MOLECULES

April 6-19

Hadi Abderrahim, *Cell Genesys, Inc.*
Bruce Birren, *California Institute of Technology*
Doug Vollrath, *Stanford University*

This course will cover the theory and practice of manipulating and cloning high molecular weight DNA. The course will focus on the use of yeast artificial chromosome (YAC), bacterial artificial chromosome (BAC) and bacteriophage P1 cloning systems for library construction and techniques of pulsed field gel electrophoresis (PFGE). Lectures and laboratory work will include an introduction to yeast genetics, the isolation and manipulation of high molecular weight DNA from a variety of sources, and preparative and analytical PFGE. YAC, BAC, and P1 clones will be produced and characterized by a number of approaches. These will include library screening, contig assembly, long range restriction mapping, and recovery of YAC ends. A variety of size standards for PFGE will be prepared and their separation on many different types of PFGE gel boxes will be compared. Lectures by outside speakers on topics of current interest will supplement the laboratory work.

Tuition, Room and Board....\$1,660

PROTEIN PURIFICATION AND CHARACTERIZATION

April 6-19

Richard Burgess, *University of Wisconsin-Madison*
James Kadonaga, *University of California, San Diego*
Sue-Hwa Lin, *University of Texas*
Daniel R. Marshak, *Cold Spring Harbor Laboratory*

This course is intended for scientists who are not familiar with techniques of protein isolation and characterization. It is a rigorous program that includes laboratory work all day and a lecture with discussion session every evening. Each student will become familiar with each of the major techniques in protein purification by actually performing four separate isolations including: (i) a regulatory protein from muscle tissue; (ii) a sequence-specific, DNA-binding protein, (iii) a recombinant protein overexpressed in *E. coli*; and (iv) a membrane-bound receptor. A variety of bulk fractionation, electrophoretic, and chromatographic techniques will be employed including: precipitation by salts, pH and ionic polymers; ion exchange, gel filtration, hydrophobic interaction, and reverse phase chromatography; lectin affinity, oligonucleotide affinity, and immunoaffinity chromatography; polyacrylamide gel electrophoresis, and electroblotting; high performance liquid chromatography. Procedures will be presented for solubilizing proteins from inclusion bodies and refolding them into active monomeric forms. Methods of protein characterization will be utilized including immunological and biochemical assays, peptide mapping, amino acid analysis, protein sequencing, and mass spectrometry. Emphasis will be placed on strategies of protein purification and characterization rather than on automated instrumental analysis. Guest lecturers will discuss protein structure, modifications of proteins, methodologies for protein purification and characterization, and applications of protein biochemistry to cell and molecular biology. Guest lecturers have included R. Aebersold, J. Garrels, L. Gierasch, G. Hart, A. Kornberg, N. Pace, Y. Paterson, G. Rose, J. Rothman, B. Stillman and N. Tonks.

Tuition, Room and Board....\$1,660

**APPLICATION DEADLINE:
JANUARY 15, 1994.**

Application/information may be obtained from:

REGISTRAR
Cold Spring Harbor Laboratory

1 Bungtown Road
Cold Spring Harbor, NY 11724-2213
Phone: 516-367-8345
Fax: 516-367-8845



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TOXICOLOGY

To support the preclinical and clinical development of novel anticancer and antiviral agents by evaluation of the toxicology profile of therapeutic candidate molecules. The successful applicant will serve as Study Director for GLP toxicology projects and responsibilities will include protocol development, communication with contract facilities, project management and data review. A Ph.D. in toxicology, pharmacology, physiology or a related discipline is required together with a minimum of 3 years postdoctoral training, preferably in an industrial or contract laboratory environment providing experience in GLP testing and applied R & D. Code TOX.

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POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

Applied Ocean Physics & Engineering
Biology * Marine Chemistry & Geochemistry
Marine Geology & Geophysics
Physical Oceanography

Applications are invited from new or recent doctorates in the fields of biology, molecular biology, microbiology, chemistry, engineering, geology, geophysics, mathematics, meteorology and physics, as well as oceanography. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise. Fellowships are awarded for one year (extendable up to two years in special circumstances) with a stipend of \$35,000 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by January 15, 1994 for the 1994-95 awards. Awards will be announced in March. Write for application forms to: Dean of Graduate Studies, P.O. Box 5, Woods Hole Oceanographic Institution, Woods Hole, MA 02543. Or call (508) 457-2000, ext. 2200 or Email bederemer@whoi.edu.



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OCEANOGRAPHIC
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Protein Computational Simulation and Modeling

a) To study structure-function-dynamic relations of proteins/enzymes in order to propose experimentally-testable modifications to alter and improve functionality. b) To develop improved simulation, data refinement, and folding methods. For example, see a) Prot. Sci. 2, 357 (1993); b) Prot. Eng. 6, 359 (1993); c) J. Comp. Chem. 14, 541 (1993); d) J. Biomolec. Struct. Dyn. 7, 1019 (1992); e) Prot. Eng. 5, 703 (1992); f) Proteins 12, 266 (1992); Proteins 13, 26 (1992).

1. Immediate Openings for Postdoctoral Fellows

Computational experience and knowledge of protein biophysical chemistry are preferred. Doctoral degree must have been awarded within last 3 years. Available immediately, but will wait for excellent candidates. Stipend begins at \$36K.

2. Permanent STAFF Opening

At least 3 to 4 successful years of postdoctoral experience, or equivalent, with strong publication record. Strong computational technical skills and extensive protein biophysical chemistry experience. Available in late winter or early spring of 93/94. Reference #: 941014CSP.

Interaction with experimental collaborators and publication productivity are essential. Send resume (+ email address), publication list and up to 3 significant reprints. Location: National Laboratory in Southcentral Washington State.

Contact: Dr. Rick L. Ornstein, Molecular Science Research Center, Battelle-Pacific Northwest Laboratory, Richland, WA 99352; INTERNET: RL.Ornstein@PNL.GOV.



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Research Scientist - Immunology

We are seeking a creative scientist to enhance our research efforts in our cellular immunology and inflammation programs. In addition to providing basic research, this scientist will oversee our FACS capabilities and identify new technologies in this area. The successful candidate will hold a PhD and several years of relevant experience in an industrial, academic or hospital setting. This position provides opportunities for research project leadership and planning commensurate with experience.

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We encourage your immediate response. Qualified candidates please forward your resume to: Biogen, Inc., Dept. SM, 14 Cambridge Center, Cambridge, MA 02142; FAX# (617) 252-9595. Biogen is an Equal Opportunity Employer.

BIOGEN



GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is directed towards the discovery of novel molecular mechanisms that can be used as drug targets to treat serious diseases. In particular, research is focused on the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a leading scientist

to study the role of interactions between antigen presenting cells and T cells in the generation of allergic diseases

The successful applicant will work with an interdisciplinary team of immunologists, biochemists and molecular biologists investigating asthma. Informal enquiries should be directed to Dr. Jean-Yves Bonnefoy (+41 22 706 97 23).

The Institute has a strong publication record, which the appointee will be expected to maintain. Attendance and presentation at scientific meetings is encouraged, as well as collaborative research with academic groups.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live. The Institute for Molecular Biology is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to : Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology S.A., 14, chemin des Aulx, 1228 Plan-les-Ouates, Switzerland.

WASHINGTON UNIVERSITY Department of Anatomy and Neurobiology FACULTY POSITION IN NEUROSCIENCE

We seek an individual taking innovative approaches to fundamental questions in molecular, cellular, or developmental neuroscience for a tenure track faculty position in the Department of Anatomy and Neurobiology at Washington University School of Medicine. The department already houses more than a dozen active research labs in neurobiology, and it is part of a much larger interdepartmental neuroscience program. The department has state-of-the-art facilities for automated DNA sequencing, confocal microscopy, image processing, as well as access to a soon-to-be-built transgenic mouse facility. Both the department and the neuroscience program offer numerous opportunities for scientific interactions and collaborations. Our focus is on an appointment at the Assistant Professor level, but an appointment at a more senior level (Associate Professor or Professor) will also be considered.

Applicants should send two copies of: a curriculum vitae, synopsis of research interests, and names, addresses, phone/fax numbers of three references to: Dr. David Van Essen, Head, Department of Anatomy and Neurobiology, Box 8108, Washington University School of Medicine, 660 S. Euclid Ave., St. Louis, MO 63110, USA. Deadline for submission of applications is January 1, 1994.

Washington University is an Affirmative Action/Equal Opportunity Employer. Applications from minorities and women are encouraged.

The U.S.
Department of Energy
sponsors

GLOBAL CHANGE DISTINGUISHED POSTDOCTORAL FELLOWSHIPS



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

- U.S. citizens and permanent resident aliens
- Doctoral degree received after May 31, 1991
- Tenable at various university and federal laboratories, including those of DOE and NASA
- Stipend: \$35,000
- Deadline: February 15, 1994

For application materials contact:

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



ASSISTANT PROFESSOR - SOUTHERN CALIFORNIA

We are seeking a talented candidate with the Ph.D., MD or MD/Ph.D. degrees for the position of Assistant Professor of Physiology and Biophysics at the University of Southern California. Our targeted area of interest is molecular and/or biophysical approaches to broadly defined areas of metabolism, endocrinology and/or diabetes research. Candidates will be expected to develop an independent funded research program which will integrate with areas presently represented. The Department has over 3 million dollars in external funding, and has particular strength in metabolism at the organismic level, as well as biophysics and molecular research in the area of ion transport, with focus on Na/K ATPase. Additional areas of interest are blood cell biophysics and reproductive endocrinology. It would be of great interest if a candidate were able to interact with and therefore coalesce these interests in the Departments. Potential areas of interest for recruitment include, but are not limited to insulin and other hormone signaling, glucose transporter proteins, molecular regulation of intracellular pathways, biophysics of islet-cell function, immunology of Type 1 diabetes, and/or molecular genetics of Type 1 or Type 2 diabetes mellitus. The University of Southern California is a major research institution with extensive collaboration opportunities with basic and clinical departments, as well as the Institute for Genetic Medicine, Norris Cancer Center, and Doheny Eye Institute. Interested candidates should send a Curriculum Vitae, and 3 names who may be contacted for letters of reference to Richard N. Bergman, Ph.D., Chair, Department of Physiology and Biophysics, USC Medical School, MMR630, 1333 San Pablo Street, Los Angeles, CA 90033.

POSITIONS OPEN

FACULTY POSITION AT UCSD SCHOOL OF MEDICINE

ASSISTANT or ASSOCIATE PROFESSOR—level position is available effective May 1, 1994, in a newly organized Division of Cellular and Molecular Medicine at the University of California San Diego School of Medicine.

Applicants are expected to have: a successful record of research in cellular and molecular biology, including neurobiology; establish an active individual research program; welcome collaboration with faculty of the Division or the School; and participate actively in teaching and research training of medical and graduate students. The Assistant Professor position requires an M.D., Ph.D., or M.D./Ph.D. degree, at least two years of postdoctoral training, and a strong record of well-organized research. Applicants for the Associate Professor position are expected to have already achieved an outstanding record in their field of research.

Send application, curriculum vitae, list of publications, summary of research planned for immediate future, and list of six or seven potential referees, before December 15, 1993, to: George E. Palade, M.D., Dean for Scientific Affairs, UCSD School of Medicine, 9500 Gilman Drive, Room 1315, La Jolla, CA 92093-0602. *Affirmative Action/Equal Opportunity Employer.*

VASSAR COLLEGE ASSISTANT OR ASSOCIATE PROFESSOR

Eukaryotic Geneticist—Biology Department, Vassar College, seeks geneticist with research interests in developmental genetics, cellular genetics, or related areas who is committed to undergraduate education, to fill tenure-track position at the rank of assistant or associate professor beginning August 1994. Excellent laboratory facilities and start-up support are available. Ph.D. required and postdoctoral work and teaching experience are desirable. The successful candidate will be expected to develop an independent research program and to engage students in research.

Send curriculum vitae, a description of current and planned research, a statement of teaching interests, three letters of reference to: Robert B. Suter, Chair, Biology Department, Vassar College, Poughkeepsie, NY 12601 by December 1, 1993. *Vassar encourages women and minorities to apply. Affirmative Action/Equal Opportunity Employer.*

BIOLOGIST (Anatomist/Organismic Biologist)

Simpson College seeks an **ASSISTANT PROFESSOR** of biology (tenure-track) for fall 1994. Ability to teach human anatomy with cadaver dissection, introduction to Biology of Organisms plus specialty courses required. Preferred areas of additional training include developmental biology, or comparative anatomy, or exercise physiology. The successful candidate will be committed to teaching and undergraduate research and interested in student life and activities. Ph.D. by September 1, 1994, required. Send résumé and three reference letters to: Dr. Joe K. Moody, Chair, Department of Biology and Environmental Science, Simpson College, 701 North C Street, Indianola, IA 50125. Deadline: December 15, 1993. *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

THE JOHNS HOPKINS UNIVERSITY DEPARTMENT OF BIOLOGY SCHOOL OF ARTS AND SCIENCES

Applications are invited for a tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level in the areas of Molecular, Cellular and Developmental Genetics. Successful applicants are expected to generate creative and productive research programs that will interface with the diverse scientific interests of the department. Applicants are expected to participate in the teaching of Genetics at the undergraduate and graduate levels. Send curriculum vitae, list of publications, a statement of research interests and plans, and arrange to have three letters of reference forwarded before December 1, 1993, to: Chairman, Search Committee, Department of Biology, The Johns Hopkins University, Baltimore, MD 21218. *Minority and female candidates are encouraged to apply. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, Nutrition/Dietetics, Food Science and Human Nutrition Department, Institute of Food and Agricultural Sciences, University of Florida; 12-month, tenure-track. Qualifications include an earned doctorate in nutrition or related discipline and A.D.A. Registered Dietitian (R.D.); clinical or postdoctoral experience preferred. Duties and responsibilities include: teaching and assisting in the administration of the undergraduate (DPD) and graduate (Combined MS-AP4) dietetics programs, and development of a research program that complements an existing departmental area (basic and clinical nutrition, nutritional biochemistry, dietetics, food science and toxicology). Application requirements: curriculum vitae, transcripts sent directly from the institutions, minimum 3 reference letters, and a statement outlining career goals and teaching, research, and professional interests (refer to position FSHN-1117-Reissue). All information must be submitted by February 14, 1994, to: Dr. Harry S. Sitren, Chair, Search and Screen Committee, Food Science and Human Nutrition Department, IFAS, University of Florida, P.O. Box 110370, Gainesville, FL 32611-0370; Telephone: (904) 392-1991, Extension 116; FAX: (904) 392-9467. *The University of Florida is an Equal Opportunity/Affirmative Action Institution and encourages applications from females and minorities.*

TERRESTRIAL ANIMAL ECOLOGIST

Tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** position open fall 1994 for ecologist studying animal interactions at the population or community level. Research should include a combination of innovative experimental, theoretical and/or modeling approaches. Primary teaching will be one course a semester alternating among undergraduate and graduate ecology courses and an introductory-level course. Candidates must have Ph.D. with proven record of good teaching and research abilities (demonstrated by publications). Postdoctoral experience preferred. Screening begins 10 January 1994 and will continue until position is filled. Send curriculum vitae, four letters of recommendation, representative reprints, summary of teaching experience and description of research interests to: Dr. James N. Thompson, Jr., Chair, Department of Zoology, University of Oklahoma, Norman, OK 73019.

An Equal Opportunity/Affirmative Action Employer. OU has a policy of being responsive to needs of dual-career couples.

ASSISTANT/ASSOCIATE PROFESSORS NEUROSCIENCE

The Department of Anatomy and the Neuroscience Center at Louisiana State University Medical Center seek to identify two neuroscience faculty. A Ph.D. and three years of postdoctoral experience are required. Scientists who study receptor, neurotransmitter, or channel mechanisms and/or molecular approaches to development and plasticity using patch clamp or calcium imaging are especially encouraged to apply. However, all well-qualified applicants with an outstanding funding record/potential will be considered. Salary levels are competitive with ample space and start-up funds. Participation in the Interdisciplinary Ph.D. Program in Neuroscience is encouraged. Send curriculum vitae, research interests, and names of three references to: Dr. R. Ranney Mize, Department of Anatomy, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR

The Department of Medicine, Division of Nephrology, is seeking a candidate for a tenure-track assistant professor position in the area of cell biology, starting January 1, 1994. Candidates must have a Ph.D. in cell biology, molecular biology or equivalent plus at least 3 to 4 years of postdoctoral research experience. The position requires research accomplishments in cell biology relating to the actin-spectrin cytoskeleton. Desired, but not required, are experience with fluorescent analog cytochemistry, video imaging, gene cloning and gene expression analysis. Significant research accomplishments and evidence of outstanding research potential will be key considerations. Applicants should provide curriculum vitae, names and addresses of three references and a brief statement of research interests and plans. Please send applications to: Dr. Bruce A. Molitoris, Department of Medicine, Fesler Hall 108, 1120 South Drive, Indianapolis, IN 46202-5116. *Indiana University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CELLULAR ENDOCRINOLOGIST University of Arizona

The Departments of Physiology and Obstetrics and Gynecology (ObGyn) are jointly seeking a tenure-track **ASSISTANT PROFESSOR**. Preference will be given to applicants with research expertise in reproductive endocrinology, using the techniques of molecular biology. The tenure line will be in Physiology. Successful candidates should have postdoctoral experience and must document their potential to develop an independent research program in reproductive endocrinology. The development of research interactions with relevant colleagues in ObGyn is essential and university-wide interactions are encouraged. Teaching responsibilities will include formal lectures on cellular and systems endocrinology, tutorials with ObGyn residents, and participation in a university-wide Ph.D. program in the physiological sciences. Submit curriculum vitae and statement of research interests and have three supporting letters sent to: Dr. Patricia B. Hoyer, Cellular Endocrinologist Search Committee, Department of Physiology, College of Medicine, University of Arizona, Tucson, AZ 85724. To insure consideration, applications should be submitted by February 15, 1994; however, applications will be accepted until the position is filled. *The University of Arizona is an Affirmative Action/Equal Opportunity Employer and applications from females and minority group members are strongly encouraged.*

Boston University seeks an **ASSOCIATE or FULL PROFESSOR** starting fall 1994 for its graduate Department of Cognitive and Neural Systems. This department offers an integrated curriculum of psychological, neurobiological, and computational concepts, models, and methods in the fields of neural networks, computational neuroscience, and connectionist cognitive science in which Boston University is a leader. Candidates should have an international research reputation, preferably including extensive analytic or computational research experience in modeling a broad range of nonlinear neural networks, especially in one or more of the areas: vision and image processing, visual cognition, spatial orientation, adaptive pattern recognition, and cognitive information processing. Send complete curriculum vitae and three letters of recommendation to: Search Committee, Department of Cognitive and Neural Systems, Room 240, 111 Cummington Street, Boston University, Boston, MA 02215. *Boston University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, BIOCHEMISTRY. Coe College, a selective private liberal arts college of about 1100 students, is inviting applications for a tenure-track position in the area of biochemistry, to begin in September 1994. The appointment is expected to be at the Assistant Professor level. Coe College's program is accredited by the American Chemical Society. Candidates should have a Ph.D. and a strong commitment to teaching and carrying out research with undergraduates, and will be expected to teach in the areas of biochemistry, molecular genetics, and general chemistry. Submit curriculum vitae, undergraduate and graduate transcripts, and a statement of teaching and research interests, and arrange to have at least three letters of reference sent to: Dr. Wendy Dunn, Associate Dean for Academic Affairs, Coe College, Cedar Rapids, IA 52402. Application deadline is December 1, 1993. *As an Affirmative Action/Equal Opportunity Employer, Coe College is especially interested in identifying women and minority candidates.*

Virginia Commonwealth University's Department of Pharmacology and Toxicology seeks a tenure-track **ASSOCIATE PROFESSOR**, with a Ph.D. or equivalent and four or more years of relevant postdoctoral experience. To complement an existing multidisciplinary group, preference will be given to those using *in vivo* and *in vitro* approaches to the study of analgesia and pain pathways and with a background in signal transduction, particularly calcium. Experience in cannabinoid pharmacology is also highly desired, as is training of pre- and postdoctorals. Teaching experience in graduate and professional schools is required, as is current and transferable grant support. Send curriculum vitae and names and addresses of three references, by December 5, 1993, to: Dr. George Kunos, Box 613, MCV Station, Richmond, VA 23298. Position description available upon request. *VCU is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.*

SANDOZ RESEARCH INSTITUTE

IF YOUR CAREER BELONGS ON THE
LEADING EDGE OF SCIENTIFIC RESEARCH,
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At Sandoz Pharmaceuticals Corporation, research is the tool by which we gain the knowledge needed to improve the lives of thousands across the country and around the world. That is why we have committed substantial resources to expanding our Research Institute and its state-of-the-art technologies. Our developments are the result of research conducted by professionals who specialize in many different fields.

Senior Research Scientist Atherosclerosis

The Atherosclerosis and Vascular Biology research group is seeking a Senior Research Scientist with expertise in thrombosis drug discovery. The successful candidate will help organize an expanding interdisciplinary team of biologists, animal modelers, and medicinal chemists in approaches which will explore opportunities for future therapeutic intervention in the area of thrombosis. A Ph.D. degree in pharmacology or biochemistry in an area related to vascular biology plus a minimum of 5 years of experience beyond postdoctoral training in thrombosis research is required. The candidate must have hands-on experience in both in vitro and in vivo thrombosis modeling and will be responsible for team development and leadership.

Position #2594.

Postdoctoral Fellow Diabetes

The Diabetes Research Department seeks a recent graduate with a Ph.D. in the life sciences to work in our physiology section. Practical expertise in mammalian signal transduction pathways and a working knowledge of carbohydrate and fat metabolism is required. Experience in insulin signal transduction and/or intercellular calcium activated processes is desirable. Excellent communication skills and the ability to work as part of a multidisciplinary team of scientists are essential. This position offers the opportunity to learn, work and publish in an exciting and well supported research environment. Postdoctoral appointments are for one year but are extendable for a second year by mutual agreement.

Position #PD-019.

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 consideration, please refer to the position number of interest and forward your curriculum vitae and the names and addresses of three references to:

SANDOZ PHARMACEUTICALS CORP

SRI Human Resources

Building 122/1

East Hanover, NJ 07936

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bringing research to life



Chair of Pharmacology (Ref: 93/94-1)

Applications are invited for the Chair of Pharmacology, following the retirement of Professor C.W. Ogle. Appointment will normally be made on a three-year fixed term contract, tenable from July 1, 1994.

The University reserves the right not to fill the Chair or to fill the Chair by invitation or to make an appointment at a lower level.

Annual salary [non-superannuable but attracting 15% (taxable) terminal gratuity] will be within the professorial range, of which the minimum is HK\$836,580 and the average is HK\$1,034,760 (approx. US\$108,647 - US\$134,384 respectively; US Dollar equivalents as at October 7, 1993) with starting salary depending on qualifications and experience. At current rates, salaries tax will not exceed 15% of gross income. Housing at a charge of 7.5% of salary, children's education allowances, leave, and medical benefits are provided.

Further particulars and application forms may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: (852) 559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK). Closes **14 January 1994.**

ECOLOGIST

The California Coastal Commission seeks a scientist for a long-term marine resource mitigation program consisting primarily of a 150-acre wetland restoration project and a 300-acre artificial reef project. Mitigation monitoring will continue for approximately 30 years. The position will be located in San Francisco at the Coastal Commission's headquarters.

The ecologist will evaluate designs for the mitigation projects, monitor their performance, and evaluate their effectiveness. Together with other project ecologists and consultants, the successful candidate will coordinate and oversee the scientific program. Duties include designing a long-term sampling program to determine whether the mitigation projects meet specific performance standards, evaluating contractor reports, and providing advice on scientific issues. The ecologist will work closely with Coastal Commission staff and a scientific advisory panel to achieve the project's objectives.

Candidates must have a doctorate in ecology or a related field and postdoctoral or other professional experience. Preference will be given to candidates with a strong scientific background, good quantitative and writing skills, demonstrated project management abilities, and the ability to work productively on an interdisciplinary team.

Competitive salary, commensurate with experience, and excellent benefits. Submit curriculum vitae, selected reprints, and three letters of reference to: Chris Parry, California Coastal Commission, 45 Fremont Street, Suite 2000, San Francisco, CA 94105-2219. Please include fax numbers and e-mail addresses, if possible. Deadline for applications is January 7, 1994.

Women and minorities are strongly encouraged to apply for this unique opportunity.

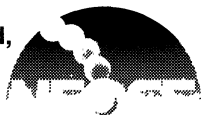
SONGS  San Onofre Nuclear Generating Station • Mitigation Monitoring Program

MICROBIOLOGIST, Ph.D. and/or M.D.

Neose Pharmaceuticals, Inc. is a biotechnology organization dedicated to the development of novel therapeutic oligosaccharides as inhibitors of binding of pathogenic microorganisms to mammalian cells. We currently seek an experienced Microbiologist to direct pre-clinical research program.

This position requires at least 5 years post-doctoral research experience. Familiarity with infectious diseases and their pathogens is desired.

Neose is located in Horsham, PA, a suburb of Philadelphia. We offer a competitive compensation package in a dynamic atmosphere where employees have the opportunity to participate in and benefit from the company's success. Please send C.V. to: **Personnel Manager, Neose Pharmaceuticals, Inc., 102 Witmer Road, Horsham, PA 19044.** EOE.



MOLECULAR NEUROBIOLOGIST ASSISTANT PROFESSOR

**Brown University
Department of Neuroscience**

Tenure track faculty position for individual with expertise in molecular neurobiology with research that will complement the department's interests in sensory and motor systems, learning and memory, synaptic plasticity, and neuronal function. Candidates must have a Ph.D. or M.D. and Postdoctoral experience. Must show evidence of ability to establish an independent, externally funded research program and must demonstrate the potential for excellence in teaching. Brown has active graduate programs in Neuroscience and Molecular & Cell Biology.

Applications will be reviewed beginning December 1, 1993 and continue until a successful candidate has been identified or the search closed. Submit a curriculum vitae, a set of representative reprints, a concise description of research interests and goals, and arrange for three letters of reference to be sent to: **Dr. John Donoghue, Search Committee, Department of Neuroscience, Division of Biology & Medicine, Box 1953, Brown University, Providence, RI 02912.** We encourage applications from women and minority candidates. *Brown is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR-BIOLOGY PROGRAM ORGANISMAL BIOLOGIST

CSU San Marcos, the newest campus of the California State University system located near San Diego, invites applications for appointment as **Program Director** to lead its expanding Biology Program. Our Program occupies new teaching and research facilities in a region rich with research activities in biotechnology and marine biology. Candidates should have experience and qualifications commensurate with appointment at the **Full Professor** level. We seek a person with demonstrated leadership ability who will actively represent and promote the Program in the University and community. Applicants should have a strong commitment to undergraduate teaching and to a research program involving undergraduate and graduate students. The appointee would chair the Program, offer courses in their area of specialty, contribute to the teaching of lower division biology, and participate in the growth of our research programs. The Program currently has strengths in molecular, developmental, and marine biology, and is seeking an **organismal biologist** who uses modern, experimental approaches to questions in **either**: (i) animal physiology, and able to teach a broad-based core course in comparative physiology; **or** (ii) community/population ecology, with the ability to teach a broad-based core course in ecology. Applicants should send a letter of application, CV, statements of research and teaching interests and accomplishments, and a discussion of administrative philosophy, along with the names, addresses, and phone numbers of at least three references to: **Biology Search Committee, CSUSM, San Marcos, CA 92096 (FAX 619-752-4111).** Consideration of applications will begin on December 15, 1993 and continue until a suitable candidate is found. *CSU San Marcos is an Affirmative Action/Equal Opportunity Employer. The University has a strong commitment to the principles of diversity and seeks a broad spectrum of candidates including women, members of minority groups, and people with disabilities.*

Senior Research Chemist/ Formulations

Global Resources, Global Programs, Global Results

Lederle Laboratories, a subsidiary of American Cyanamid's Medical Research Division, has an opportunity available immediately for a senior-level Chemist to be responsible for the technology transfer, scale-up and validation for parenteral dosage forms from the pilot lab through to production sites. The selected candidate will also interface between our formulation, production and QC areas.

To qualify, applicants should have either: a Ph.D. and 3-5 years' experience in parenteral development; A Master's degree and 8+ years' experience; OR a Bachelor's degree and 10+ years' experience.

We offer a competitive salary and benefits package. Applicants should send their resume, along with salary requirements, to: Lederle Laboratories, Medical Research Division, Dept. 9637, 401 Middletown Road, Pearl River, NY 10965. We are an equal opportunity employer.



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SCIENTISTS & CHEMISTS

Emisphere Technologies, Inc., a publicly held company, is developing its patented oral drug delivery technology. Career opportunities include:

PEPTIDE CHEMIST- Candidates must have a Ph.D. degree and a minimum of 5 years hands-on experience in the area of peptide chemistry, solution and solid phase peptide synthesis, and the structure identification of peptide oligomers. Experience with molecular modeling software a plus.

SCIENTIST/CARDIOVASCULAR- Ph.D. with 3+ years in cardiovascular research as it deals with pharmaceutical development. Experience working with heparin and/or coagulation factors required.

SR. FORMULATIONS SCIENTIST- Ph.D. with 7-10 years experience. Responsible for program direction of formulating Emisphere's carriers for delivery within the GI tract. Experience with oral suspensions and emulsions preferred. Experience with regulatory submissions desirable.

FORMULATIONS SCIENTIST- Ph.D. with 0-3 years experience or MS with 5-7 years experience working in the area of pharmaceutical formulations for oral drug delivery. Send resume to:



Ms. Sally Love
Emisphere Technologies, Inc.
15 Skyline Drive
Hawthorne, New York 10532
FAX (914) 347-7493

EMISPHERE TECHNOLOGIES, INC.



DEAN OF THE COLLEGE OF SCIENCE The University of Texas at El Paso

The University of Texas at El Paso, the largest comprehensive university in the United States with a majority Hispanic student population, invites applications for the position of Dean of the College of Science. One of six academic colleges in the University, the College of Science is comprised of five academic departments, Biological Sciences, Chemistry, Geological Sciences, Mathematical Sciences, and Physics, and offers a wide variety of baccalaureate and master's degrees and doctoral programs. The College's 90+ tenured and tenure-track faculty with strong orientation in teaching and research serve over 1,400 science majors.

The Dean reports to the Vice President for Academic Affairs and Research, and is responsible for budgeting, long-range planning, and day-to-day administration of the College. An important leadership role will include strategic planning and submitting major proposals for extramural funding, liaison with external funding agencies, successful development of additional Ph.D. programs, development of community outreach and strong science education initiatives, and leadership of existing research centers, all in support of the College's increasing excellence in teaching, research, and community service consistent with the mission of the University.

Candidates must have an earned doctorate and be eligible for a faculty appointment as a full professor in an existing academic discipline, relevant administrative experience, a consistent record of scholarly activities including university teaching experience and research, and demonstrated success in obtaining extramural funding. A review of applicants will begin on November 1, 1993. Please forward applications and a list of five current references with names, addresses, telephone numbers to Dr. Jack Bristol, Search Committee Chair, College of Science, U.T. El Paso, El Paso, Texas 79968. The University does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.

TWO MOLECULAR GENETICS FACULTY POSITIONS UNIVERSITY OF MISSOURI- COLUMBIA HEALTH SCIENCES CENTER

The Department of Biochemistry and the Division of Medical Genetics in the Department of Child Health invite applications for two tenure track faculty positions at the Assistant Professor level. Candidates should have an excellent academic background with postdoctoral training and a strong research program in human molecular genetics. The candidates will be expected to establish a program of basic molecular research, to train graduate students and medical genetics post-doctoral fellows, and to be involved in some teaching of medical and graduate students. One position requires the candidate be Board Certified/Eligible in Molecular Genetics through The American Board of Medical Genetics. Both individuals will be jointly appointed in Biochemistry and Child Health. The Health Sciences Center and contiguous University offer an exciting multidisciplinary Molecular Biology Program with outstanding Core Facilities while Medical Genetics' large clinical service will provide the molecular geneticist with immediate access to numerous research opportunities.

All applications must be received by February 1, 1994 in order to receive full consideration. Please send a curriculum vitae, research plan and have three letters of reference sent to:

Judith H. Miles, M.D., Ph.D.
Chair, Search Committee
Division of Medical Genetics
University of Missouri Health Sciences Center
Columbia, MO 65212
314-882-6991

The University of Missouri is an Equal Opportunity/Affirmative Action Employer, complies with the American Disabilities Act and encourages applications from qualified women and minorities.

MILES

Pharmaceutical
Division

BIOCHEMISTS/ ENZYMOLOGISTS

Miles, Inc., Pharmaceutical Division, is looking for two individuals with 3-4 years' postdoctoral experience in biochemistry/enzymology. The ideal candidate will be experienced in the purification and characterization of proteins and enzymes involved in intracellular signalling cascades and be willing to apply that expertise to the study of bone metabolism. A knowledge of the isolation, culture and characterization of bone cells and their precursors is desirable, but not necessary.

We offer attractive compensation and generous health, medical and relocation benefits. Resumes, including salary history and objectives, should be forwarded in confidence to: **Miles Inc., Pharmaceutical Division, Dept. AABZ, 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M/F/D/V

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR POPULATION/ EVOLUTIONARY GENETICS

The Department of Biology, San Francisco State University, invites applications for a tenure-track position in population, conservation or evolutionary genetics starting fall 1994. A Ph.D. is required and postdoctoral experience desirable. We seek an individual who is thoroughly conversant with modern theory in population genetics and the analysis of molecular data. The successful candidate is expected to (i) offer courses in population genetics and area of specialization, and participate in graduate and undergraduate instruction, (ii) establish a research program, (iii) interact with the program in conservation biology, and (iv) supervise M.A. students. We are interested in candidates dedicated to excellence in both teaching and research.

Send letter of application, curriculum vitae, statement of teaching and research goals, two research papers or manuscripts, and three letters of reference by 15 December 1993 to: **Dr. G. A. Antipa, Chair, Hiring Committee, Department of Biology, San Francisco State University, San Francisco, CA 94132.** *Women and minority candidates are especially urged to apply. SFSU is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION

ANIMAL OR PLANT ECOLOGIST—The University of Oregon invites applications for a tenure-track faculty position as **ASSISTANT PROFESSOR** in the Department of Biology. The appointment will be in the Ecology and Evolution Group, which has strengths in population and quantitative genetics, evolution, microbial ecology, and conservation biology. We seek candidates in terrestrial or aquatic ecology whose research combines empirical and experimental ecology with an evolutionary, theoretical, or conservation-related component. Applicants are expected to have a strong record of scientific research and a commitment to excellence in teaching at the undergraduate and graduate levels. Application deadline is December 31, 1993. Applicants should send curriculum vitae with a statement of research interests and selected publications, and have three letters of recommendation sent to: **Ecology Search Committee, Department of Biology, University of Oregon, Eugene, OR 97403.** *The University of Oregon is an Affirmative Action/Equal Opportunity Employer committed to compliance with ADA and cultural diversity.*

ASSISTANT/ASSOCIATE PROFESSOR BIOENGINEERING/NEUROSCIENCE

The Department of Biomedical Engineering at the University of Southern California announces a new tenure-track faculty position in cellular/systems neuroscience. Applicants should be capable of establishing an externally funded research program that includes a rigorous quantitative approach to functional aspects of the nervous system, and of teaching courses at the graduate and undergraduate levels. A combined theoretical and experimental approach is preferred, though applicants with purely theoretical research programs will be considered. Multiple opportunities for collaboration exist with other USC academic and research programs, such as the Biomedical Simulations Resource, the Neural Informational and Behavioral Sciences program, and the Center for Neural Engineering. Send curriculum vitae, names of 3 to 5 references, teaching record, and a description of current research and future plans by **January 1, 1994**, to: **Search Committee, Department of Biomedical Engineering, Olin Hall 500, University of Southern California, Los Angeles, CA 90089-1451.** *The University of Southern California is an Equal Opportunity/Affirmative Action Employer.*

BROWARD COMMUNITY COLLEGE BIOLOGY INSTRUCTOR

Master's degree with a minimum of eighteen graduate semester hours in Biology. Teaching duties to include General Biology, Anatomy and Physiology, and accompanying labs. Résumés must be received before 3:00 p.m. by **January 27, 1994**, at: **Broward Community College, Human Resources Department, 225 East Las Olas Boulevard, Ft. Lauderdale, FL 33301**, or call 1-800-682-3646 for an official employment application.

Equal Access/Equal Opportunity Institution.

POSITIONS OPEN

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

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

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

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

PRESIDENT/SCIENTIFIC DIRECTOR

The Neuropsychiatric Research Institute (NRI) invites applications and nominations for a senior position from well-established investigators who will lead and develop research programs in neuroscience. NRI is an independent, nonprofit, clinical and basic science research institution located in Fargo, North Dakota. It has a long history of amicable cooperation with the University of North Dakota School of Medicine and affiliated hospitals and with North Dakota State University where excellent opportunities exist for the development of collaborative research programs and the potential for faculty appointments and teaching activity. Minimum qualification requirements include an M.D. and/or Ph.D. degree with demonstrated excellence in research and leadership and the ability to develop research programs in neuroscience. Applicants should submit, prior to **December 1, 1993**, curriculum vitae, statements of current and planned research interests and letters from at least three references to: **Dr. John W. Vennes, Interim President, Neuropsychiatric Research Institute, 120 Eighth Street South, Fargo, ND 58103.** For information call (701) 239-1606. *NRI is an Equal Opportunity and Affirmative Action Employer.*

The San Diego Natural History Museum is seeking an **ASSISTANT or ASSOCIATE CURATOR** in either **VASCULAR PLANT SYSTEMATICS** or **VERTEBRATE SYSTEMATICS**. The successful applicant will be expected to develop and maintain an extramurally funded, collections-based research program utilizing modern systematics techniques. Interest in the flora or fauna of the southwestern United States and western Mexico desirable. Other responsibilities include enhancing the Museum's collections and consulting on the Museum's education and exhibition programs. Ph.D. required; postdoctoral experience desirable. Send letter of application, curriculum vitae with reprints, statement of research interests, and list of at least three references by **December 15, 1993**, to: **Curator Search Committee, San Diego Natural History Museum, P.O. Box 1390, San Diego, CA 92112.** *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

The Maryland Psychiatric Research Center (MPRC), University of Maryland School of Medicine, invites applications for a full-time **FACULTY POSITION** in an expanding Neuroscience Program. Preference will be given to individuals in the areas of behavioral neuropharmacology or growth factor research. Ph.D. and a minimum of two years of postdoctoral experience required. The successful candidate will be expected to develop a vigorous, independently funded research program. Generous start-up funds will be provided. Send curriculum vitae, a brief summary of current and future research interests and the names of three references to: **Dr. Robert Schwarcz, MPRC, P.O. Box 21247, Baltimore, MD 21228.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Biology seeks a broadly trained microbiologist with expertise in molecular genetics for a tenure-track position. Teaching responsibilities include an upper-level undergraduate microbiology course, a non-majors lab course, advanced courses in area of expertise, and direction of undergraduate research projects. Candidates should have a Ph.D. and postdoctoral training. Send letter of application, curriculum vitae, description of teaching and research interests, and arrange to have three letters of recommendation sent by **November 15, 1993**, to: **Chair, Biology Department, Skidmore College, 815 North Broadway, Saratoga Springs, NY 12866.** *Skidmore College is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT/ASSOCIATE MEMBER

The Molecular Pharmacology and Therapeutics Program at Memorial Sloan-Kettering Cancer Center invites applicants for positions at the Assistant or Associate Member level. The candidate should have a Ph.D. and/or M.D. degree, and postdoctoral experience. We seek independent investigators with a background of scientific accomplishment who will use forefront molecular and biochemical techniques for the development of new cancer therapies. The position is available July 1, 1994. Start-up support will be provided. Candidates should send curriculum vitae along with a description of career goals, research objectives and names of three references by **January 1, 1994**, to: **Joseph R. Bertino, M.D., Program Chairman, Molecular Pharmacology and Therapeutics Program, Memorial Sloan-Kettering Cancer Center, Box 78, 1275 York Avenue, New York, NY 10021.** *Memorial Sloan-Kettering Cancer Center is an Affirmative Action/Equal Opportunity Employer.*

CHEMISTRY, INSTRUCTOR. The ACS-approved Department of Chemistry at Agnes Scott College invites applications for a teaching position with research opportunities starting August 1994. The non-tenure-track position will carry full-time teaching responsibilities for the fall semester, and in the spring semester, part-time teaching with opportunities to conduct research in departmental facilities and/or in collaboration with researchers in the metropolitan Atlanta area. Salary will be based on the actual teaching assignment for each semester. Teaching responsibilities will include portions of the introductory course as well as courses representing the specialties of the candidate.

Agnes Scott is a Presbyterian-affiliated, liberal arts college for women located in metropolitan Atlanta, Georgia. To ensure full consideration, applications should be received by **December 15, 1993**. Send letter of application describing teaching interests and scholarly plans; curriculum vitae; and names, addresses and telephone numbers of three professional references to: **Professor L. Venable, Agnes Scott College, Campbell Hall, Decatur, GA 30030-3797.** *Members of underrepresented groups are urged to apply. An Equal Opportunity Employer.*

NEUROSCIENCE FACULTY POSITIONS

Two tenure-leading faculty positions are available in the Department of Cell Biology and Anatomy at the University of Nebraska Medical Center (academic rank dependent on qualifications). We are seeking cellular and molecular neuroscientists with research programs in developmental neurobiology or neuroendocrinology. An ability to attract extramural funding is expected. Major teaching responsibilities will be in a 6-week medical neuroscience course and participation in the graduate neuroscience program. The University of Nebraska Medical Center is a dynamic and expanding facility that ranks high in national measurements of faculty productivity and academic atmosphere. Salary and research incentives are highly competitive. Send curriculum vitae and the names of three references to: **Dr. Robert Norgren, Chair, Neuroscience Search Committee, Department of Cell Biology and Anatomy, University of Nebraska Medical Center, 600 South 42nd Street, Box 986395, Omaha, NE 68198-6395.**

The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer; minorities and women are encouraged to apply.

Molecular Biology of Neural Development and Plasticity

A major grant from the Lucille P. Markey Charitable Trust is providing funding for a continuing search for several faculty positions in molecular neurobiology, with an emphasis upon molecular mechanisms of neural development and plasticity.

We plan to fill one or more tenure track faculty positions (rank open) for fall 1994 and additional positions in the next several years. Candidates will be appointed primarily in the Departments of Cell and Structural Biology or Biochemistry, although appointments may be made in other departments. Substantial funds are available for laboratory start-up and research. The University has a strong interdisciplinary Neuroscience Program with strengths in neural development and plasticity and growing strength in cellular and molecular neuroscience. In addition to the interdisciplinary resources of the Beckman Institute, the University of Illinois is home to the NSF-funded National Center for Supercomputing Applications, and a Biotechnology Center that provides a number of subsidized services including production of oligonucleotides, peptides and monoclonal antibodies, molecular graphics, fluorescence activated sorting, protein and DNA sequencing and transgenic animal facilities.

Salary is commensurate with experience and qualifications. Minorities and women are particularly encouraged to apply. Applications (vita, 1-2 representative reprints, and a statement of research interests) and three letters of recommendation should be sent to :

Byron Kemper, Chair, Molecular Neuroscience Search Committee
School of Life Sciences, 393 Morrill Hall, 505 S. Goodwin Ave.
Urbana, IL 61801 Tel. (217) 333-3044

This is an ongoing search and applications received after the deadline may receive consideration. However, to ensure full consideration for fall 1994 hiring, applications should be received by January 15, 1994.

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



WASHINGTON UNIVERSITY IN ST. LOUIS

Biology & Biomedical Sciences

Graduate and postdoctoral training opportunities in...

Chemical Neurotransmission and Ion Channels

- Dennis Choi** - Neuronal injury in neurological disease states; "excitotoxic" injury.
Jim Huettner - Excitatory amino acid receptors and synaptic transmission in the central nervous system.
Jim Krause - Peptide secreting neurons; functions and regulation of the substance P receptor.
Chris Lingle - Ion channels; regulation of intracellular calcium.
Peter Lukasiewicz - Visual information processing; synaptic transmission and its modulation in the vertebrate retina.
Jeanne Nerbonne - Membrane ion channels; neurohormones and intracellular second messengers.
Colin Nichols - Molecular biology and electrophysiology of potassium channels.
Steve Rothman - Physiology of central excitatory and inhibitory synaptic transmission.
Carl Romano - Glutamate receptor biochemistry, physiology, pathology; retinal neurotoxicology; neurobiology of polyamines.
Joe-Henry Steinbach - Function and regulation of channels in membrane receptors.
Lawrence Salkoff - Molecular biology of ion channels in Drosophila and mammals.
Charles Zorumski - Excitatory amino acids and their role in synaptic transmission.
...and others

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

POSTDOCTORAL POSITIONS

Cell and Molecular Biology of Reproduction

Postdoctoral positions are available at the Worcester Foundation for Experimental Biology to study cellular and molecular aspects of reproduction. These positions are supported by an NIH training grant applicable to U.S. citizens/permanent residents. The faculty and their research interests are:

Hagan Bayley, Ph.D.: Signal transduction in sperm and egg; molecular biology of ion channels.

Harvey Florman, Ph.D.: Regulation of sperm ion channels; mechanisms of exocytosis; zona pellucida structure and function.

Daniel Kilpatrick, Ph.D.: Regulation of spermatogenic cell development and differentiation at the transcriptional level; male germ cell-specific trans-acting factors.

José Lemos, Ph.D.: The role of second messengers in steroidogenesis in Leydig cells.

John McCracken, Ph.D.: Molecular and cellular mechanisms controlling the reproductive cycle.

Clare O'Connor, Ph.D.: Protein modifications during gametogenesis; mechanism of oocyte maturation.

George Witman, Ph.D.: Control of sperm motility; sperm maturation and hyperactivation; phosphorylation; structure and function of dynein.

David Wolf, Ph.D.: Biophysics of fertilization and the acrosome reaction in mammalian sperm.

The Worcester Foundation for Experimental Biology offers excellent facilities and a stimulating environment for postdoctoral study. The Foundation is a private, non-profit research institute, located on a 100-acre campus in Shrewsbury, Massachusetts, 35 miles west of Boston. Please send curriculum vitae and names of three references to the faculty member(s) of interest, c/o Human Resources, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545, USA.

An Affirmative Action/Equal Opportunity Employer M/F/H



Worcester Foundation for Experimental Biology

Laboratory of Molecular Biology
National Institute of Diabetes, Digestive and Kidney Diseases
National Institutes of Health

Structural Biologist

A structural biology unit is being established with intramural funding to conduct a research program within the NIH intramural program. In addition to molecular biology, the local research environment includes protein crystallography, nuclear magnetic resonance studies of macromolecules and time-resolved spectroscopy. Applicants for this tenure track position should have a record of achievement in some area of structural biology relating structure to function. Salary commensurate with credentials and research experience.

Qualified candidates should send curriculum vitae and names and addresses of three references to:

David R. Davies
Laboratory of Molecular Biology
NIDDK, NIH
Bldg. 5, Room 338
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-4295
(301) 496-0201 Fax



• NIH is an Equal Opportunity Employer

AQUATIC ECOLOGY Cooperative Research Units

The U.S. Fish and Wildlife Service invites applications for a Research Fishery Biologist (GS-482-11/12) to serve as the Assistant Unit Leader for Fisheries at the Ohio Cooperative Fish and Wildlife Research Unit. The successful candidate will serve at The Ohio State University, Columbus, OH, where the Unit is located, and will receive a courtesy faculty appointment in the Department of Zoology of the College of Biological Sciences. This position will become part of the National Biological Survey.

Assistant Leader duties include establishing a strong research program, teaching at the graduate level, and providing technical assistance to resource managers on fisheries resource issues.

Requirements for the position include a Ph.D. in aquatic ecology, fishery management, aquatic conservation biology, or closely related field, a record of research productivity in community ecology, population dynamics, population genetics, or population modeling, and an ability and commitment to teach.

The Division of Cooperative Research will pay up to \$10,000 for associated moving expenses for new appointees to the Federal Service.

For general information about the Cooperative Unit, The Ohio State University, or the Department of Zoology, contact the University's Representative to the Unit Coordinating Committee: Dr. Peter W. Pappas, Professor and Chairperson, Department of Zoology; telephone: (614) 292-8088; FAX: (614) 292-2030; E-mail: PAPPAS.3@OSU.EDU.

TO APPLY: Send a completed and current Standard Form 171, accompanied by a Supervisor Appraisal, a separate statement addressing each quality ranking factor, and a copy of college transcripts to: U.S. Fish and Wildlife Service, ATTN: Dorothy Easley, Division of Personnel Management, Mail Stop 725 - Arlington Square, 18th and C Street NW, Washington, DC; telephone (703) 358 1771; TDD (703) 358-2288. Applications must reference the Ohio Assistant Leader Position. Applications must be postmarked no later than November 22, 1993.

*The U.S. Fish and Wildlife Service is an
Equal Opportunity Employer.*



PROVOST

Duke University invites applications and nominations for the position of Provost. The Provost at Duke is the chief academic officer of the University and reports directly to the President.

Please send nominations or expressions of interest along with a complete curriculum vitae, if available, to: **Chair, Provost Search Committee, Duke University, Box 90030, Durham, NC 27708-0030.** Screening of candidates will begin on December 1, 1993 and continue until appointment is made.



Duke University

Duke University is an Equal Opportunity/Affirmative Action Employer

BIOLOGISTS & CHEMISTS

Science Applications International Corporation (SAIC), is a nationally recognized leader in technology analysis and applications. We are building an elite group of analysts in the Washington, D.C. area to study chemical and biological weapons proliferation. Expertise is required in the areas of research and development, precursor processing, agent production, and weapons development and manufacturing.

All positions require individuals with a technical degree and 5+ years experience who are self-motivated, work well with minimal supervision, and are team players. Applicants selected will be subject to a security investigation and must meet eligibility requirements for access to classified information. All work will be conducted in the McLean, VA area.

Please send your resume and salary requirements in confidence to: **SAIC, Dept. LMP-69, 1710 Goodridge Dr., McLean, VA 22102.** SAIC is an Equal Opportunity Employer.



UNIVERSITY OF CALIFORNIA, SANTA CRUZ DEPARTMENT OF BIOLOGY

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

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

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

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

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

BIOCHEMISTRY

Biochromatographer / Biochemist

J.T. Baker is a Total Quality company and has been a leader in the laboratory chemicals business since 1904 with products of superior quality, purity and performance. We are headquartered in Phillipsburg, NJ, directly across the Delaware River from the Lehigh Valley of Pennsylvania (Allentown/Bethlehem/Easton). Business operations are worldwide.

We are seeking a highly motivated candidate for the position of "Biochromatographer/Biochemist". The area of focus is our biochromatography product line.

Key responsibilities include the development of new chromatographic supports for the purification and analysis of proteins, developing methods for key applications, assisting Marketing, Sales, and Operations with technical input, preparing and presenting seminars, and providing technical support to customers.

Candidates should have an MS or PhD in Biochemistry or a related discipline, preferably with some experience with the chromatographic separation of proteins (either work-related or academic). The ideal candidate will have experience developing a variety of chromatographic methods, excellent oral and written communication skills, and be willing to travel.

J.T. Baker offers a competitive salary and comprehensive benefits package including incentive savings, dental and tuition reimbursement plans. In confidence, interested candidates should send their resume and salary requirements, along with a cover letter which is responsive to each requirement to:

Human Resources, J.T. Baker Inc., 222 Red School Lane, Phillipsburg, NJ 08865. Direct Applications Only - No Telephone Calls. Resume must be received by October 22, 1993. Equal Opportunity Employer, M/F.



Wayne State University Chair, Department of Biological Sciences

Wayne State University invites applications for the position of Professor and Chair of the Department of Biological Sciences in the newly formed College of Science. There are currently 26 faculty members in the Department and at least six additional full-time appointments are anticipated. Over 160 graduate students are enrolled in the Ph.D. and M.S. programs in Biological Sciences and in the M.S. program in Molecular Biotechnology. The Department is housed in over 65,000 square feet of research space, including a recently completed six story research building. There are strong ties between the Department and the Wayne State University School of Medicine and the new interdisciplinary Center for Molecular Medicine and Genetics. Wayne State University, located in Detroit's Cultural Center, is an urban research University serving 34,000 students.

We seek an academic leader to enhance the research and teaching programs of the Department. Candidates should have a distinguished record of scholarly activity, an internationally recognized research program, and a strong commitment to graduate and undergraduate education in the life sciences. The incoming chair will have an exceptional opportunity to enhance significantly the research and teaching programs of the Department. In order to be assured of full consideration, applications should be received by December 15, 1993. Letters of application, curriculum vitae, and names of at least 4 references should be sent to:

**Professor Robert H. Rownd, Chair
Biological Sciences Chair Search Committee
1360 Biological Sciences Building
Wayne State University, Detroit, MI 48202**

*Wayne State University is an Equal Opportunity/
Affirmative Action Employer.*

The Virus & Cell Biology Department at Merck Research Laboratories, a world leader in pharmaceutical and vaccine research, has two career opportunities for qualified candidates.

Senior Research Virologist

The successful candidate must possess a Ph.D. in virology or the equivalent with postdoctoral experience in the growth and characterization of viruses. Experience in multiple virus systems and molecular genetics with knowledge of medical or biochemical virology is highly desirable.

The focus of this position will be to develop and optimize growth of viral vaccines and apply novel assays to measure immunity to viruses. The candidate will also lead the effort to develop improved stabilizers for viral vaccines. Experience in molecular, biochemical or biophysical characterization of viruses is also desired.

Molecular Biologist

The successful candidate must possess a BS/MS in molecular biology, microbiology, or equivalent and related experience in a wide variety of techniques associated with cloning and expressing genes in bacteria and cell culture. Experience in techniques such as cloning, sequencing, PCR, hybridization, cell culture transfection, immunoblot analysis, and reporter gene assays is highly desirable.

The focus of this position will be to join a team of scientists involved in the search and development of novel vaccines. The candidate will be involved in cloning and studying expression of viral genes in bacteria and mammalian cells.

Excellent salary and benefits programs accompany these positions at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with references, transcripts and cover letter to **Personnel Manager, Ad B-17, MRL Human Resources - W42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486.** EOE/AA/VH/Employer.



MERCK
Research Laboratories

DIRECTOR, DIVISION OF VIRAL PRODUCTS Center for Biologics Evaluation and Research Office of Vaccines Research and Review Food and Drug Administration

The Food and Drug Administration is seeking an outstanding scientist to lead the Division of Viral Products within the Center for Biologics Evaluation and Research, Office of Vaccines Research and Review located on the NIH campus in Bethesda, Maryland. The position is in the Senior Executive Service with a salary of \$92,900 to \$107,300.

The Director will be expected to oversee a broad scientific program in the area of human viral diseases and their prevention. The Director will manage a staff of 55 scientists which is responsible for the evaluation of viral vaccines and related products assuring their safety and efficacy. The Division of Viral Products is expected to grow substantially in the near future. The Director will be responsible for developing new programs and recruiting highly qualified scientists to run them. The Director will have the opportunity to continue his/her research program as well as to develop the programs of the division in a well funded research environment that includes modern laboratories, accredited small animal and primate facilities and the advantages of the NIH research community.

Applicants must have strong leadership and managerial abilities in directing complex scientific programs, ability to work effectively with high-level government officials, the scientific and academic communities, medical and health related organizations and representatives of regulated industries, particularly in relation to the prevention of infectious diseases.

Applicants must have previous executive level managerial experience in the area of scientific administration. An M.D. degree with board certification of a Ph.D. in a related science with a national/international reputation in virology or a related area is desired.

Interested candidates should send their curriculum vitae to: Jim Keady, Office of Human Resources Management, Food and Drug Administration, Parklawn Building, Room 7B-32, 5600 Fishers Lane, Rockville, MD 20857. For further information, call Mr. Keady collect at (301) 443-1755.

This position is also available to current Commissioned Officers of the U.S. Public Health Service, or by former officers willing to rejoin the Corps.

Applications will be accepted until December 31, 1993.

*An Equal Opportunity Employer
FDA is Smoke-Free*

POSITIONS OPEN

ACS EMINENT SCHOLAR FACULTY POSITION CANCER CELL/MOLECULAR BIOLOGY University of Florida College of Medicine

Applications and nominations are invited for the American Cancer Society Edward R. Koger Eminent Scholar Chair in Basic Cancer Research. The successful candidate for this faculty position will hold a Ph.D. or M.D. degree, and she/he will have demonstrated excellence in research on the cellular and/or molecular biology of cancer. This should include gene transfer, gene therapy, cell division cycle control, cytokine action, molecular genetics, chromosomal/chromatin structure, oncogene molecular biology. Commitments for laboratory and office space, start-up funding, as well as other resources will assure the Koger Scholar's sustained trajectory to international eminence. She/he can also play a significant role in efforts to build a major cancer research center at the University of Florida. Appointment in an appropriate department within the College of Medicine will be based upon the candidate's accomplishments and field of interest. The closing date of nomination or application (including curriculum vitae, statement of research goals, current funding, and three letters of reference) is November 15, 1993, with a start date of January 2, 1994. The salary is negotiable. Address all correspondence to:

Daniel L. Purich, Chairman
Koger Scholar Search Advisory Committee
Department of Biochemistry & Molecular Biology
University of Florida College of Medicine
P.O. Box 100245
Gainesville, FL 32610-0245
*Equal Employment Opportunity/
Affirmative Action Employer.*

THE UNIVERSITY OF MICHIGAN SCHOOL OF DENTISTRY TISSUE ENGINEERING POSITION

The University of Michigan School of Dentistry invites applications for a full-time tenure-track faculty position in the Department of Oral Medicine, Pathology, and Surgery. We are seeking an individual who has demonstrated competence in cell biology, developmental biology, chemical engineering or biomedical engineering to participate in a multidisciplinary program in tissue engineering. Candidates must have a Ph.D. and appropriate postdoctoral or equivalent research experience. The successful candidate will be expected to develop and maintain a high-quality extramurally funded research program. Dual appointments in biomedical or engineering discipline will be encouraged. Salary and academic rank commensurate with experience. *The University of Michigan is an Equal Opportunity Employer and members of minority groups are strongly encouraged to apply.* Please send curriculum vitae, names of three references, and a brief description (not to exceed one page) of research interests by January 1, 1994, to: Peter J. Polverini, D.D.S., D.M.Sc., Chairman, Search Committee, University of Michigan School of Dentistry, 1011 North University, Room 5217, Ann Arbor, MI 48109-1078; Telephone: (313) 936-2191, FAX: (313) 764-2469.

TENURE-TRACK FACULTY RESEARCH POSITIONS IN MOLECULAR AND CELLULAR PATHOLOGY. The Department of Pathology, University of Alabama at Birmingham, is seeking individuals for positions at the faculty level who are interested in joining an active and growing group of investigators in basic research and graduate training. Applicants should have a Ph.D. or M.D. degree and are expected to develop independently funded research programs. Special consideration will be given to individuals with experience in cellular and molecular biology, signal transduction, a desire to interact with other investigators and a willingness to participate in graduate and postdoctoral training. Level of appointment will be determined by qualifications. Please send detailed curriculum vitae including description of research, recent reprints and names of three references to: Thomas M. Lincoln, Ph.D., Acting Director, Division of Molecular and Cellular Pathology, Department of Pathology, University of Alabama at Birmingham, 1670 University Boulevard, Birmingham, AL 35294-0019. *UAB is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minorities.*

POSITIONS OPEN

LIFE COLLEGE ANATOMIST—EDUCATION

Openings in Anatomy Department are available December 1993. These are full- and part-time teaching positions. Previous teaching and work experience is preferred. Ph.D. or M.S. degree in Anatomy or M.D. is required. Interested applicants please send résumé, three letters of references, official college transcripts, and academic credentials to:

Dr. Samuel Demons, Chair
Department of Anatomy
Life College
1269 Barclay Circle
Marietta, GA 30060

Life College is an Equal Employment Opportunity Employer.

RESEARCH FACULTY POSITION IN MOLECULAR PATHOGENESIS

The Public Health Research Institute (PHRI) invites applications for appointment as a member of its research faculty at either the junior or senior level. Candidates must have training and experience of the highest quality and a research program addressing fundamental questions on the mechanism of pathogenesis in eukaryotic or prokaryotic systems. The research program must be funded or, in the case of a junior applicant, eminently fundable. The PHRI is an independent, not-for-profit research organization founded in 1942. Its current programs center on basic molecular biology and molecular genetics of disease-causing organisms. The PHRI offers an excellent research environment and laboratory facilities, start-up funds, and a generous benefits package. Salary is negotiable. Candidates should submit curriculum vitae, a statement of research interests and accomplishments, and a list of at least three references. Review of applications will begin in December 1993, but applications will be accepted until the position has been filled. Applications should be sent to: Dr. Leonard Mindich, Chairman, Recruitment Committee, Public Health Research Institute, 455 First Avenue, New York, NY 10016.

The PHRI is an Equal Opportunity Employer.

FACULTY POSITION Sexually Transmitted Diseases (STD's)

The Department of Microbiology, the University of Texas Health Science Center at San Antonio, seeks to hire a tenure-track faculty member (junior-to-senior appointment) with interest in the molecular pathogenesis and immunology of STD's. Agents of particular interest are human papilloma virus and chlamydia, although individuals with strong records of research achievement in other STD's are encouraged to apply. The successful candidate is expected to develop/maintain innovative research program and to participate in departmental teaching activities. This is an exceptional opportunity to join our expanding department committed to excellence in research and teaching, and is located in a desirable academic-geographic setting. Applicants should mail curriculum vitae, a statement of current and future research goals, and arrange to send three letters of reference by January 24, 1994, to: Dr. Joel B. Baseman, Professor and Chairman, Department of Microbiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78294-7758. *The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.*

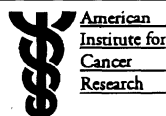
POSTDOCTORAL POSITION Karolinska Institute, Stockholm, Sweden

Available for studies of the structure and function of MHC class I molecules. The focus of the group is on the function of class I molecules in CTL and NK recognition. Biosynthesis and intracellular transport, cell surface expression and MHC class I interaction with CTL and NK cells are studied to achieve this goal. Experimental models include studies of somatic cell mutants, class I transgenic and gene knock-out mice. Experience in molecular biology, biochemistry or cellular immunology are desired. Review of applications will begin November 15, 1993, and will continue until the position, located in Stockholm, Sweden, is filled. Send curriculum vitae, brief description of research experience, and names of three references to: Dr. Hans-Gustaf Ljunggren, Center for Cancer Research, Massachusetts Institute of Technology, 77 Massachusetts Avenue, E17-322, Cambridge, MA 02139-4307, USA.

POSITIONS OPEN

TROPICAL BOTANIST/ETHNOBOTANIST

World Wildlife Fund's Conservation Science Program seeks a tropical botanist/ethnobotanist. Responsibilities are to: provide expertise and leadership in tropical botany; conduct research on sustainable use of wild plant populations; assist in design, monitoring, and evaluation of biodiversity conservation efforts in extractive reserves; and contribute to the growth of the conservation science program at WWF by collaborating with regional staff in field projects and through publications, lectures, and public outreach. The successful applicant must hold a doctoral degree in botany, plant ecology, conservation biology, or natural resources management (and have at least 5 years of experience in tropical countries). Fluency in Spanish, French, or another second language is preferred. Competitive salary and benefits appropriate to the nonprofit sector will be provided. Please forward curriculum vitae, a description of research goals, relevant publications, and the names, addresses, telephone and FAX numbers of three references to: World Wildlife Fund, Human Resources Department 344F, 1250 24th Street, N.W., Washington, DC 20037.



VICE PRESIDENT FOR RESEARCH PROGRAMS—requires research lab experience, strong interest in diet, nutrition and cancer, and administrative experience. Responsible for administration and technical support of multimillion dollar national research grant program and serving as scientific advisor to Institute. Requires doctorate in biomedical sciences, strong communication skills, and good links with nutrition and scientific communities. **American Institute for Cancer Research, 1759 R Street, N.W., Washington, DC 20009 or (202) 328-7744.**

POSTDOCTORAL POSITION in Molecular and Developmental Neurobiology available to study several novel homeobox genes that are expressed in the brain. The studies focus on the regulation of expression of these genes and their role in determining cellular phenotypes in the mammalian brain. Experience in molecular biology, cell biology or neuroscience required. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Robert F. Bulleit, University of Maryland School of Medicine, 655 West Baltimore Street, Room 4-018, Baltimore, MD 21201. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Available immediately to either study regulation of gene expression during fetal lung development with emphasis on the surfactant protein genes or to work on studies where the genetic basis of certain pulmonary diseases is being explored. Prefer applicant experienced in recombinant DNA techniques or molecular genetics, but also interested in highly motivated applicants without experience. Send curriculum vitae to: Joanna Floros, Ph.D., Department of Cellular and Molecular Physiology, Pennsylvania State University College of Medicine, 500 University Drive, Hershey, PA 17033. Telephone: 717/531-6972. *We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.*

POSTDOCTORAL POSITION IN CELLULAR NEUROPHYSIOLOGY to study neuronal circuitry and synaptic plasticity in the electrosensory lobe of an electric fish. The work will be done in an *in vitro* slice preparation. Experience with intracellular recording is essential. Experience with *in vitro* preparations and patch clamp recording is desirable. Please send curriculum vitae, brief statement of long-term research interests, and names and addresses of three references to: Dr. Curtis Bell, R. S. Dow Neurological Sciences Institute, Legacy Health Systems, 1120 N.W. 20th Avenue, Portland, OR 97209.

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY OF RETROVIRUSES. A position is available to study the molecular basis of pathogenesis by mouse or human retroviruses. Experience in Molecular Biology or Immunology is desirable.

Please send curriculum vitae and names of at least two references to: Dr. Jack Lenz, Department of Molecular Genetics, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.

Equal Opportunity Employer.

PHARMACOLOGIST

Alteon, Inc., an expanding research and development pharmaceutical company involved in the discovery and development of innovative technologies for treating diabetic complications is seeking a highly motivated pharmacologist with broad experience in whole animal experimentation to join our Biochemistry Department.

Responsibilities include performing and supervising experimental research involving metabolic modeling, surgical procedures as well as radiotelemetric measurements.

The successful candidate should possess a Ph.D. in pharmacology or physiology and should have greater than four years industry experience in the study of animal models of Type I or Type II diabetes mellitus.

We offer a competitive salary and excellent benefits in a small, rapidly growing company. Send resume and salary history to Christina Blicharz, Alteon Inc., 165 Ludlow Avenue, Northvale, New Jersey 07647. We are an Equal Opportunity Employer

ALTEON, INC.

FACULTY POSITION: CANCER RESEARCH - TRANSGENIC MICE

The Department of Molecular Genetics at the Ohio State University, in collaboration with the OSU Comprehensive Cancer Center, is searching for a tenure-track faculty member at the Assistant, Associate or Full Professor level. We are interested in highly qualified applicants who are conducting basic investigations in the general field of cancer research and who use transgenic mice as the experimental system. The faculty member will be housed in a spacious, newly renovated laboratory in the Biological Sciences Building and will have excellent access to the recently completed transgenic mouse facility located at the OSU Biotechnology Center. The transgenic facility includes state-of-the-art equipment as well as technical support.

A generous recruiting package is available, including a highly competitive, hard money salary, as well as substantial funds for equipment purchase and initial operating expenses. The Ohio State University is in the process of a major expansion in Molecular Biology and Biotechnology, and a substantial number of additional positions are anticipated in the future. Research with transgenic mice is one of the areas targeted for expansion.

The Ohio State University is the flagship institution of the state's higher education system. It is located in the state capital, Columbus, which is a growing, yet highly affordable metropolitan area of about 1.3 million people. Columbus has been ranked by Newsweek as one of the country's best places to live and work.

Applications should include a detailed curriculum vitae, a description of research experience, a statement of the nature of the planned independent research program, and the name, address and telephone number of each of four scientists who have agreed to serve as references. Applications will be accepted until suitable candidates are hired, but recruiting is scheduled to begin in earnest by January 1994. Information about our Department can be obtained by calling our office at 614-292-8084.

Applications should be sent to: Dr. Lee Johnson, Molecular Genetics Search, Department of Molecular Genetics, The Ohio State University, 484 W. 12th Avenue, Columbus, OH 43210.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.

Our entrepreneurial environment naturally evolves as a function of our mission: the development of recombinant DNA-based human therapeutics, utilizing the principles of cellular and molecular biology...through rapid product development and innovative commercialization strategies. We currently have a career opportunity in our Process Development Group for a:

RESEARCH SCIENTIST

Reporting to the Laboratory Head, Cell Culture Process Development, you will be responsible for providing biological insight and input into the development of scalable processes with a variety of mammalian cell lines. The selected candidate will research cell characteristics and culture conditions to determine optimum growth environments for successful scale-up and will develop novel serum-free media formulations for growth and culture of suspension- and anchorage-dependent mammalian cells. You will serve as the resident "cell expert" within the Process Development Group. Additionally, you will supervise two Research Associates; assist the Vector Development Group in the identification of cell lines that exhibit the most desirable scale-up characteristics; and provide guidance to the Analytical Group in the development of new assays.

Candidates must have a Ph.D. in biological sciences with emphasis on cell physiology, biochemistry and/or molecular biology desirable. Industrial experience in Process Development and a research background involving several different mammalian cells and culture conditions are required.

At Amgen, our staff plays an integral role in maintaining the highest of standards and product excellence. We offer a highly competitive compensation and benefits package. If you're interested in this position, please FAX/mail your resume to: **FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code OA-SC-LD-006, Amgen Center, Thousand Oaks, CA 91320-1789.** Please, principals only

AMGEN

We are an equal opportunity employer M/F/D/V.

ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Microbiology at the University of Illinois at Urbana-Champaign seeks candidates for a full-time tenure track position at the Assistant Professor level. Applicants should have a Ph.D. degree, postdoctoral experience, and show exceptional promise in developing an active research program in Microbiology. Preference will be given to applicants with research interests in the physiology, biochemistry, or molecular genetics of microorganisms that further expand the Department's breadth of microbial diversity. Responsibilities include teaching undergraduate and graduate students. Starting date August 1994. Salary will be commensurate with experience. The Department of Microbiology offers a supportive and collegial atmosphere and a strong graduate program. There are extensive interdepartmental interactions in microbial and eukaryotic cell and molecular biology, immunology, developmental biology, evolution, biochemistry, and biophysics. The University of Illinois at Urbana-Champaign offers an outstanding and exciting academic research environment including a Biotechnology Center and state-of-the-art facilities for hybridoma production, flow cytometry, electron microscopy, X-ray crystallography, and computer analyses. Applicants should submit a curriculum vitae, a description of research interests and future plans, and have at least three letters of reference sent to:

Stanley Maloy, Chair
Faculty Search Committee
Department of Microbiology
University of Illinois
131 Burrill Hall
407 S. Goodwin Avenue
Urbana, IL 61801
Telephone: (217) 333-1736
FAX: (217) 244-6697

To ensure full consideration, applications should be received by December 15, 1993. Interviews may be conducted before the closing date, but no final decision will be made before that time.

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

DIRECTOR Neuromusculoskeletal Institute

The UMDNJ-School of Osteopathic Medicine is currently recruiting for a clinical scientist as the Director of our Neuromusculoskeletal Institute (NMI), reporting to the Dean.

The NMI will be a focal point for the UMDNJ-School of Osteopathic Medicine's academic, clinical, and research efforts of osteopathic medicine. Basic science research projects will include the study of neuromuscular function and neuromuscular biology, non-invasive studies using MRI technology to determine changes in muscle metabolism under a variety of conditions, biomechanical research, the study of pain and biomaterials research. The Institute will bring under one roof, faculty from all departments, creating a uniquely osteopathic/ambulatory clinical research center.

We seek the following qualifications for this position:

1. A national reputation in Clinical Research;
2. Specialty training in the field of neurological, neuromuscular, or musculoskeletal disorders with a focus in one or more of the systems;
3. If a physician, Board Certification in one of the applicable specialties required;
4. Significant clinical, research, and administrative experience including:
 - Ability and experience as a science and administrative leader for an interdisciplinary group of clinicians and basic science investigators.
 - Budget management and control.
 - Program planning and grantsmanship.

Send curriculum vitae to **R. Michael Gallagher, D.C., Vice Dean, UMDNJ-School of Osteopathic Medicine, One Medical Center Dr., Ste. 305, Stratford, New Jersey 08084.** Closure date for applications is January 31, 1994.

The UMDNJ, New Jersey's University of the Health Sciences, is an Affirmative Action/Equal Employment Opportunity Employer M/F/H/V, and a member of the University Health System of New Jersey.



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

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

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

Please send a curriculum vitae, reprints of some recent papers, a brief statement about research interests and goals, and the names of three references (including complete addresses and telephone numbers) to: Jack H. Mendelson, Professor of Psychiatry (Neuroscience) or Dr. Nancy K. Mello, Professor of Psychology (Neuroscience), Co-Directors, Alcohol and Drug Abuse Research Center, McLean Hospital, 115 Mill Street, Belmont, MA 02178.

McLean Hospital is an equal opportunity
affirmative action employer.



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

DEAN COLLEGE OF NATURAL RESOURCES

The University of California at Berkeley invites applications or nominations for the position of Dean of the College of Natural Resources. The position is available on July 1, 1994.

The College of Natural Resources has been reorganized recently into four departments of instruction: Plant Biology; Environmental Science, Policy and Management, Agricultural and Resource Economics and Policy; and Nutritional Sciences; and an organized research unit; the Institute for Natural Resource Systems. These new units constitute a multi-disciplinary program designed to combine the natural and social sciences to address the complex issues of interaction between society and the natural environment; to conduct fundamental research on biological problems related to agriculture and natural resources; to promote sustainable use of natural resources; and to provide the foundation for responsible and socially acceptable management of the urban and rural environments. The College is now positioned to respond to the challenges and opportunities posed by the rapid growth and transformation of urbanized society, the development of bio-technology, and the evolving nature of environmental and resource management.

The College has an interdisciplinary faculty of 115 members and an enrollment of about 300 graduate and 700 undergraduate students. It enjoys interaction with campus programs in the natural and social sciences and engineering that are among the best in the world. Through the Division of Agriculture and Natural Resources of the University the College also has ties with strong programs at the Davis and Riverside campuses of the University of California. The Dean of the College acts as the Associate Director of the California Agricultural Experiment Station under whose auspices substantial research is conducted.

We are searching for an individual with an outstanding record of scholarly achievements in teaching and research, commensurate with appointment to full professorship at the University, and a proven record of successful management and consensus building. We seek an exceptional Dean who will take on the challenge of leading the College through the implementation of a new organizational structure and academic plan, while maintaining a long standing record of excellence in instruction and research. The many opportunities of this position include a period of faculty growth and renewal, a Cooperative Extension program, and a Capital Fund campaign already underway.

Applications or nominations should be sent, together with the names and addresses of three references to the following address no later than January 15, 1994:

Chair, Search Committee for
Dean of the College of Natural Resources
Office of the Provost, Professional Schools and Colleges
200 California Hall, University of California, Berkeley, CA 94720
Phone: 510-642-6474 FAX: 510-642-3359

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

THE 1994 LOUISA GROSS HORWITZ PRIZE

The 1994 Louisa Gross Horwitz Prize was established under the will of the late S. Gross Horwitz through a bequest to Columbia University, and is named to honor the donor's mother. Louisa Gross Horwitz was the daughter of Dr. Samuel David Gross (1805-1889), a prominent surgeon of Philadelphia, and author of the outstanding "Systems of Surgery," who served as president of the American Medical Association.

Each year, since its inception in 1967, Columbia University has awarded the Louisa Gross Horwitz Prize for outstanding basic research in the fields of Biology or Biochemistry. The purpose of this award is to honor a scientific investigator, or group of investigators, whose contributions to knowledge in either of these fields is deemed worthy of special recognition.



The prize consists of an honorarium and a citation which are awarded at a special presentation event. Unless otherwise recommended by the Prize Committee, the prize is awarded annually. The 1993 awardees were Professors Nicole Le Douarin, Professor au Collège de France and Directeur de l'Institut d'Embryologie Cellulaire et Moléculaire du CNRS et du Collège de France, and Donald Metcalf, Research Professor of Cancer Biology at the University of Melbourne, and Head of the Cancer Research Laboratory at The Walter and Eliza Hall Institute of Medical Research.

QUALIFICATIONS FOR THE AWARD

The Prize Committee recognizes no geographical limitations. The prize may be awarded to an individual or a group. When the prize is awarded to a group, the honorarium will be divided among the recipients, but each member will receive a citation. Preference will be given to work done in the recent past.

Prospective recipients should be nominated to the Chairman of the Louisa Gross Horwitz Prize Committee, Dr. Steven Siegelbaum. Nomination letters should include:

1. A summary, preferably less than 500 words, of the research on which this nomination is based.
2. A summary, preferably less than 500 words, of the significance of this research in the fields of biology or biochemistry.
3. A brief biographical sketch of the nominee, including positions held and awards received by the nominee.
4. A listing of up to ten of the nominee's most significant publications relating to the research noted under Item 1.
5. A copy of the nominee's curriculum vitae.

Send to: Dr. Steven Siegelbaum, Chairman of the Louisa Gross Horwitz Prize Committee, Office of the Vice President for Health Sciences and Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York, New York 10032.

Deadline for receipt of nominations is January 7, 1994.

The Department of Biological Sciences at the University of Cincinnati has an immediate opening for a tenure track position at the rank of Assistant Professor. The responsibilities include teaching and supervising the introductory biology laboratory course for majors and participation in lectures in the course shared with other faculty. The development and conduct of teaching effectiveness workshops, including innovative ideas for the use of instructional media, would be expected. Active involvement in additional scholarly activities, including pursuit of extramural funding for these activities, will be expected as well. Applicants must have a PhD or equivalent. Experience in the development and implementation of introductory laboratory courses is desirable. Applicants should submit a current curriculum vita with any other supporting documentation, a one page statement of teaching philosophy and goals and arrange to have three letters of recommendation sent to:

**Dr. G. D. Winget, Chair
Introductory Biology
Search Committee
Department of Biological Sciences
University of Cincinnati
Cincinnati, OH 45221-0006**

Evaluation of candidates will begin January 15, 1994, and continue until the position is filled.

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

GEORGETOWN UNIVERSITY MEDICAL CENTER

GEORGETOWN UNIVERSITY MEDICAL CENTER is seeking an internationally known scientist to lead a major initiative in brain and computer-based networks at the newly established Georgetown Program in Cognitive and Computational Sciences, as well as both senior and junior level faculty to support this project.

The *Program Director* will serve as the chief administrative and scientific leader of this federally supported research center. The ideal candidate will have demonstrated productivity and expertise in the Program's primary research areas of cognitive neuroscience (from molecular biology to *in vivo* electrophysiology), brain imaging, and artificial networks. Experience in coordinating a diverse group of neurobiologists and computational physicists, as well as ability to develop extramural support are required. Knowledge of medicine and/or biomedical applications would be valuable.

Faculty candidates should exhibit demonstrated expertise, productivity and originality in the Program's areas of interest; e.g., vertebrate electrophysiology, brain imaging, neuronal biophysics, mathematical modeling of artificial networks, physical chemistry, biochemistry, molecular and cell biology, and pharmacology. Successful procurement of funding for innovative research directions is sought. GEORGETOWN UNIVERSITY offers an excellent salary and benefits package.

Review of applications will begin immediately. Send detailed Curriculum Vitae and names of at least three references (with both telephone and fax number) to: Georgetown Program in Cognitive and Computational Sciences, The Office of the Dean of Research and Graduate Education, Georgetown University Medical Center, Medical Dental Building (Rm. NW103), 3900 Reservoir Road, NW, Washington, DC 20007.

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION—Available January 1994. Projects to include the molecular and cell biological analysis of regulatory and cytoskeletal proteins involved in mammalian cell division and differentiation. Experience in biochemist protein purification or yeast molecular genetics are highly desirable. Please send curriculum vitae to: Dr. T. J. Yen, c/o Personnel Department—MAS, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available for Research Scientist with recent Ph.D. in biochemistry, molecular biology, or cell biology to study the α_2 -macroglobulin receptor. The overall goal of the laboratory is to establish the function of this receptor system, to elucidate the function of each polypeptide associated with this receptor complex, and to investigate factors that regulate the expression of this receptor. Please submit curriculum vitae to: Dudley K. Strickland, Ph.D., HOLLAND LABORATORY, Department of Biochemistry, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Telephone: (301) 738-0726. FAX: (301) 738-0553. *Equal Opportunity Employer, M/F/H/V.*

Gastroenterology. **POSTDOCTORAL POSITION.** Immediate opening to study molecular mechanisms of enterocyte cell death in digestive diseases. Ph.D. with molecular biology background desirable. Send curriculum vitae and names of references to: Alice Chow, M.D., Emory University School of Medicine, Division of Digestive Diseases, P.O. Drawer AL, Atlanta, GA 30322. Telephone: 404-727-5638. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS in Brain Tumor Immunology, one available now, others in September 1994. Projects include control of leukocyte traffic, 3-D analysis of tumor-leukocyte interactions. Previous training in cellular immunology desirable. Reply to: Dr. L. Lampson, Center for Neurologic Diseases, Brigham and Women's Hospital, Boston, MA 02115. Please indicate fellowships for which you are eligible.

POSTDOCTORAL POSITIONS University of Alabama at Birmingham

Applications are invited for postdoctoral positions on an NIDDK-funded Training Program in **Cellular Physiology**. Appointment would begin July 1, 1994. The program's goal is to train potential academic investigators in cell membrane physiology, biochemistry, and molecular biology. Faculty include: D.J. Benos, P.D. Bell, R.J. Bridges, R.A. Frizzell, K.L. Kirk, S. Matallion, J.A. Schafer, E.J. Sorscher, and D.G. Warnock. The appointment is for two years. Direct inquiries (include curriculum vitae plus 2 to 3 letters of recommendation) to: D.J. Benos, Program Director, Department of Physiology and Biophysics, UAB, Birmingham, AL 35294. *UAB is an Equal Opportunity/Affirmative Action Employer and encourages applications of qualified women and minorities. U.S. citizenship required.*

ORGANIC CHEMIST. The Positron Emission Tomography Program at UCLA has a **POSTDOCTORAL POSITION** available. The project involves the synthesis of new biochemical probes for *in vivo* assessment of pre- and postsynaptic neurotransmitter function. Applicants must have a Ph.D. degree in synthetic organic chemistry. Opportunity for expanded knowledge and training in this rapidly expanding field. Salary Range: \$26,220 to \$35,808 per year depending on qualifications plus benefits. Send résumé to: Dr. Jorge R. Barrio, UCLA School of Medicine, Department of Pharmacology, Division of Nuclear Medicine, Los Angeles, CA 90024-6948. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available to study the structure, function, and pathophysiologic role of a novel growth factor and cytokine-inducible extracellular matrix protein. **MOLECULAR BIOLOGIST** sought with experience in site-directed mutagenesis, transfections, or genomic cloning. Please submit curriculum vitae to: Gene Liao, Ph.D., HOLLAND LABORATORY, Department of Molecular Biology, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Telephone: (301) 738-0658; FAX: (301) 738-0465. *Equal Employment Opportunity, M/F/H/V.*

POSITIONS OPEN

POSTDOCTORAL POSITION

Available to investigate genes involved in nervous system development using transgenic mouse and embryonic stem cell technologies. Expertise in neurosciences, cell biology or molecular biology required. Please send application with curriculum vitae and three references to:

Dr. Claudia Kappen
Department of Biochemistry and Molecular Biology
Mayo Clinic
13400 East Shea Boulevard
Scottsdale, AZ 85259, USA
Electronic mail address: kappen@mayo.edu

POSTDOCTORAL POSITION

UCLA School of Medicine
Department of Microbiology & Immunology

Postdoctoral Position available for individual interested in protein sorting/cell biology of prokaryotes. Sorting of surface proteins to the cell wall of gram-positive bacteria is an established research topic (Schneewind et al. *Cell* 70, 267 [1992]) but others are under study as well. Funding is available for a minimum period of four years and candidates should have a background in molecular biology or genetics. Please send a brief statement of research interests, curriculum vitae, and the names and addresses of three references to: Dr. Olaf Schneewind, Department of Microbiology & Immunology, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90024.

POSTDOCTORAL POSITION available immediately to study activation, signal transduction and secretion events and pharmacological modulation of these processes in mast cells and eosinophils. Experience with cells in culture desirable. Salary \$27,000 annually, available for two years. Send curriculum vitae and three references to: Dr. Ann S. Heiman, Florida A&M University, College of Pharmacy, Tallahassee, FL 32307. FAX: 904-599-3347.

POSTDOCTORAL POSITION/ VIRAL GENETICS

We are investigating the role of human T lymphocytes in HIV-1 infections (e.g. *PNAS* 88:1027; *J. Virology* 65:4051, 66:3151). A position is available to study the evolution of HIV-1 virus sequences that interact with human T cell receptors. Experience in molecular genetics is required. Please send summary of research experience and curriculum vitae and names of three references to: Francis A. Ennis, Division of Infectious Diseases and Immunology, University of Massachusetts Medical School, Worcester, MA 01655. *University of Massachusetts Medical School is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available in an NIH-funded program on growth regulation, transformation, and differentiation in human mammary epithelial cells in culture. Design and execute experiments utilizing molecular genetics and biochemistry to understand cell cycle control and the effects of TGF β and/or controls on expression of differentiated functions in normal and transformed cells. Ph.D. in molecular biology, biochemistry, immunology, or related field. Experience in molecular genetics, biochemistry, immunology, and cell culture related to mammalian gene expression desirable. Applicants should send curriculum vitae, cover letter summarizing research experience, and two letters of recommendation to: Dr. Martha Stampfer, c/o Lawrence Berkeley Laboratory, Staffing Office, Box #JSCI1797, One Cyclotron Road, Building 938A, Berkeley, CA 94720. *Affirmative Action/Equal Opportunity Employer.*

CELL CYCLE PROGRESSION— GROWTH FACTORS MELBOURNE, AUSTRALIA

A postdoctoral position is available for up to 3 years to study the biochemical signals controlling cell cycle progression in myeloid cells in response to growth factors. Molecular biological and/or biochemical experience preferred. Applications with names of at least two referees to: Professor John A. Hamilton, University of Melbourne Department of Medicine, The Royal Melbourne Hospital, Parkville, Victoria 3050, AUSTRALIA. Telephone: (+61 3) 344 5480. FAX: (+61 3) 347 1863.

POSITIONS OPEN

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

POSTDOCTORAL POSITION MOLECULAR NEUROBIOLOGY

Available immediately to study gene transcription and its regulation in the brain in relation to energy balance. He/she will also participate in the cloning and characterization of genes related to appetite or body weight disorders. Applicants should have a strong background in molecular biology, biochemistry or genetics. Send curriculum vitae and three letters of references to: Dr. Chilung Tang, The Rockefeller University, Box 278, 1230 York Avenue, New York, NY 10021.

POSTDOCTORAL AND PREDOCTORAL TRAINING IN NEURAL PROCESSES IN COGNITION

Opportunities for investigating cortical function at multiple levels of analysis. This is a joint program between the University of Pittsburgh, its School of Medicine, and Carnegie Mellon University. Applications are encouraged from individuals with interest in biology, psychology, engineering, physics, mathematics, or computer science. *Postdoctoral applicants must be permanent U.S. residents.* Application deadline is February 1, 1994. For information contact: Walter Schneider, Program Director, Neural Processes in Cognition, University of Pittsburgh, 3939 O'Hara Street, Pittsburgh, PA 15260. Telephone: (412-642-7061). Email: NEUROCOG@PITTVMS.BITNET.

ASSISTANT PROFESSOR OF BIOLOGY. The Department of Biology at Vanderbilt University invites applications for a tenure-track position at the level of Assistant Professor. The successful candidate will be expected to develop a strong externally funded research program studying the cell or developmental biology of plants or animals using modern techniques. Teaching responsibilities will complement the needs of the department, and will include a course in the candidate's area of specialization. Applicants should submit curriculum vitae and a description of research interests, and arrange to have three letters of recommendation sent by December 31, 1993, to: Cell Biology Search Committee, Department of Biology, Box 1812-B, Vanderbilt University, Nashville, TN 37235. *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS in analysis of neutrophil oxidase involved in superoxide production using whole cell and murine models. Studies include targeted mutagenesis in murine embryonic stem cells and human myeloid cell lines and investigation of inflammation and infection in CGD mutant mice. Qualified applicants should send curriculum vitae, names of three references, and statement of research interests to: Mary C. Dinauer, M.D., Ph.D., Herman B. Wells Center for Pediatric Research, Indiana University School of Medicine, 702 Barnhill Drive, Indianapolis, IN 46202-5225. *Indiana University is an Equal Opportunity/Affirmative Action Educator, Employer, and Contractor.*

POSTDOCTORAL POSITION available immediately to study structure and function of *nif* genes and their products for maturation of nitrogenase in *Clostridium pasteurianum*. A recent Ph.D. with training in protein biochemistry and molecular biology desired. Send curriculum vitae and three letters of reference to: Drs. J.-S. Chen and J. L. Johnson, Department of Biochemistry and Anaerobic Microbiology, Virginia Tech, Blacksburg, VA 24061-0305. *An Equal Opportunity/Affirmative Action Employer.*

DEAN, COLLEGE OF NATURAL
SCIENCES AND MATHEMATICS
CALIFORNIA STATE UNIVERSITY,
LONG BEACH

California State University, Long Beach, invites applications and nominations for Dean, College of Natural Sciences and Mathematics. The college has five departments: Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics, and Physics and Astronomy.

Qualifications include eligibility for appointment as a tenured professor in one of the College's academic departments, administrative experience, experience in developing external funds, ability to build consensus, commitment to faculty governance, sensitivity to student needs in a multicultural educational environment. For a more detailed announcement, contact Linda Sumpter at (310) 985-2333 or fax (310) 985-1680.

All applications must include a curriculum vitae, a letter of interest, and a list of at least three professional references including names, addresses, and telephone numbers. All inquiries, nominations and applications will be held in confidence. Nominations are also invited. Review of applications will begin on December 15, 1993. Position will remain open until filled. Proposed effective date of appointment is on or about July 1, 1994.

Submit applications and nominations to:

Professor Simon George, Chair
Dean Search Committee
Office of the Vice President for
Academic Affairs
California State University, Long Beach
Long Beach, California 90840

*CSULB is an Equal Opportunity/
Affirmative Action, Title IX Employer*

SECRETARY
SMITHSONIAN INSTITUTION



The Board of Regents of the Smithsonian Institution invites applications and nominations for the position of Secretary of the Institution.

As the chief executive officer, the Secretary is responsible for the development and oversight of a wide variety of activities, including research, publishing, exhibition, and educational programs in the sciences, arts, and history. Attendant responsibilities include supervision of museum, laboratory, and library operations; fund raising and public relations; support services; and development of auxiliary activities and educational outreach. The Secretary administers an annual operating budget of over \$600 million in Federal appropriations, grants and contracts, and non-appropriated Trust Funds, directing approximately 4,700 Civil Service staff, 2,100 non-Federal employees, and 5,000 volunteers in 16 museums and galleries, a zoological park, and several major scientific research installations (including an astrophysical observatory, tropical biology station, and estuarine research center). The Secretary represents the Institution before the Congress, the Executive Branch, professional societies, educational institutions, foundations and granting organizations, over two million Associate members, and the public.

Candidates should have a Ph.D. or equivalent in a field of study relevant to the Smithsonian. Additionally, candidates should have a record of superior scholarly accomplishment, a facility for written and oral communication, relevant administrative experience, and exceptional leadership ability.

Nominations and applications, together with curricula vitae, should be sent to the following address and received by December 17, 1993:

James M. Hobbins
Secretary to the Search Committee
Smithsonian Institution
Room SI-215
1000 Jefferson Drive
Washington, DC 20560

All applications and nominations will be treated confidentially. The Smithsonian Institution is an Equal Opportunity-Affirmative Action Employer.

PROFESSOR OF CANCER
BIOLOGY

Ref: C93/318

To lead the Cancer and Ageing Research Group which represents one of the University's major research activities. The post will be tenable at the Coleraine campus. The appointee will also be expected to contribute to teaching and administration.

Applicants must have a doctorate in a relevant area of the life sciences and must have a substantial record of refereed publications in cancer biology. A track record of receipt of major external funding for research is desirable.

Salary will be within the professional range, current minimum £30,398 per annum.

Further details and application forms may be obtained from the Recruitment Office, University of Ulster at Coleraine, Cromore Road, Co Londonderry BT52 1SA.
(Telephone (0265) 44141 ext 4348).

Closing date: 19 November 1993.

An equal opportunities employer. The University welcomes applications from all sections of the community, from men and women and from those with disabilities.



University of Ulster

MILES

Pharmaceutical
Division

Miles Inc., Pharmaceutical Division, a rapidly expanding, highly progressive company, offers exceptional growth and advancement opportunities. Join our team oriented, interdisciplinary environment in West Haven, CT.

SENIOR ASSOCIATE
RESEARCH SCIENTIST

We currently have a Senior Associate Research Scientist position available in the Institute for Molecular Biologicals in our new Biotechnology Unit. In this position, you will participate in discovery research involving cloning and expression of genes using mammalian systems.

The successful applicant will have extensive experience in several areas of recombinant DNA technology such as gene cloning, DNA sequencing, in vitro mutagenesis and PCR methodology. You must also have proven experience in mammalian cell biology, including maintenance of cell lines, transfection and characterization of modified cell lines, primary tissue and cell culture and analysis of expressed gene products. You will also be involved in the development and/or application of specific assays for the optimization of gene expression.

An MS degree with 2 years' experience or a BS degree with 4 years' experience is required. Excellent interpersonal and communication skills are necessary.

We offer an attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes including salary history should be forwarded to: Miles Inc., Pharmaceutical Division, Dept. ELRD, 400 Morgan Lane, West Haven, CT 06516.

An Equal Opportunity Employer M/F/D/V.

Assistant Research Scientist

IMMUNE RESPONSE TO HUMAN CANCER

A Postdoctoral Position is available for studying the nature of antigens expressed in estrogen-regulated cancers that elicit immune response. Anti-tumor T cells that recognize human breast or ovarian carcinoma will be utilized to identify antigens. The long-term goals of this work includes study of the means to enhance the anti-tumor phenotype of human T cells. Applicants should have a strong background in cellular immunology and either gene expression or protein chemistry.

Please send curriculum vitae and the names and telephone numbers of three references to: Ms. Maha Singh, NYU Medical Center, 550 First Avenue, New York, NY 10016. FAX: (212)263-8116. C.V.s to be received by 11/22. EOE, M/F.

WHERE EXCELLENCE IS A WAY OF LIFE.

A new
International Research Centre
has a position for an

Electrophysiologist Paris area

● The candidate should have PhD and post-doctoral experience.

● The candidate will be specialized in neuronal electrophysiology preferably with experience in patch-clamp, oocytes and tissue slices.

● The candidate will lead a small group and form one part of a drug discovery team. For this reason, communication skills are important. The research will be based on the discovery of new leads in neurodegenerative diseases and ageing process treatment.

The position will be based in a new centre in the Paris area.

● Please send a CV, photo and a handwritten letter, referenced 348/SC, to COMMUNIQUE 50/54 rue de Silly - 92513 BOULOGNE BILLANCOURT CEDEX FRANCE, that will transmit.

MEDIA PA

SENIOR RESEARCH ASSISTANTS

Microchemistry Service

The Microchemistry Service laboratory requires an individual with a BS degree to operate and maintain an Applied Biosystems (ABI) Model 373A Automated DNA Sequencer and analyze data with SeqEd software on a Macintosh computer. This position provides services in support of diverse research projects and requires working productively in a team environment. Previous experience with the ABI 373A Sequencer and software is desirable but training is available. Experience with a Biomek 100 Automated Laboratory Workstation or an ABI 308B DNA Synthesizer is advantageous. Opportunity for advancement.

Induced Mutant Resource

We are seeking a highly motivated individual to oversee the development lab of our newly created Induced Mutant Resource. Duties include formulation and testing of PCR protocols, participation in the development of automated PCR procedures and oversight of our Genetic Quality Control staff. Applicants should be experienced in all aspects of molecular biology.

SEND INQUIRIES TO: Harold Wheeler, Human Resource Manager, The Jackson Laboratory, 600 Main St., Bar Harbor, ME 04609-1500, (207) 288-3371, FAX (207) 288-3371, ext. 1082, Internet hrw@aretha.jax.org

An Affirmative Action/Equal Opportunity Employer



Scientific Director Gene Delivery Program

The College of Medicine at the University of Florida invites applications for a full time position at the Associate to Full Professor level to direct a developing program in targeted gene delivery. We are seeking an accomplished molecular biologist (M.D. or Ph.D.) with interests and expertise in any area relevant to gene delivery including virology, cell biology, immunology, molecular biology of human disease, gene targeting, and gene therapy. The candidate is expected to establish an outstanding independent basic research program, establish and direct a separate core facility specializing in the development of methodology relevant to gene delivery/therapy, and work interactively with our NIH-funded Clinical Research Center. An attractive package of support is available which includes laboratory space for both the candidate's research program and the core facility, as well as resources to recruit both technical personnel and additional tenure track faculty. The anticipated start date is July 1, 1994, and the salary is negotiable. Send curriculum vitae, bibliography, a brief description of research interests, and names and addresses of three references by February 1, 1994 to Dr. Richard C. Condit, Gene Delivery Search Committee, Department of Immunology and Medical Microbiology, Box 100266, University of Florida, Gainesville, FL 32610.

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

GROUP LEADER, NEUROBIOLOGY San Francisco Bay Area

SUGEN is a biopharmaceutical company devoted to receptor-based drug discovery and development, with primary emphasis on the tyrosine kinases and phosphatase receptor systems. The SUGEN team functions in a science-driven, application-oriented environment with international academic and industrial collaborators.

The position reports to the VP Research and entails supervising a group of post-doctoral researchers. This highly motivated individual will be prepared with a strong background in neurobiology; PhD, MD or equivalent degree; experience in molecular and cellular neurobiology with knowledge of neuroanatomy, neurophysiology, neurooncology, *in vitro* culture of neurons, biochemistry and molecular pharmacology.

Competitive salary and benefits, including stock options, comprise our compensation package. Please respond to: SUGEN, Inc., Attn: Dorian Rinella, 515 Galveston Drive, Redwood City, CA 94063-4720. EOE.

SUGEN, Inc.

Electrophysiologist

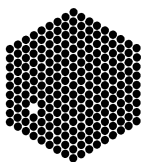
Wyeth-Ayerst Research, a Division of American Home Products Corporation, has the following opportunity available within the Cardiovascular and Metabolic Disorders Division at our pharmaceutical research facility in Princeton, New Jersey.

BS/MS applicants with 0 - 3 years of experience are sought to join a team of scientists examining the interaction of drugs with ion channel targets. Expertise in the measurement and analysis of membrane currents using patch or two-microelectrode voltage clamp techniques is required. Familiarity with techniques of DNA injection into oocytes and/or the isolation of cardiac and smooth muscle cells is desirable.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements to: **Human Resources Department, Wyeth-Ayerst Research, CN 8000, Position #521, Princeton, NJ 08543-8000. An Equal Opportunity Employer M F D V.**



Leading The Way for a Healthier World



EMBL

The European Molecular Biology Laboratory, an international research organization situated in Heidelberg, Germany, invites applications for the following vacancy:

COMPUTER MANAGER

The successful applicant will lead a group responsible for the maintenance and development of computer systems for the EMBL at Heidelberg. Equipment supported by the group includes VMS, Unix, Macintosh and DOS systems and ranges from low end workstations to massively parallel machines. Several computer based services are offered worldwide and therefore external, as well as internal, networking is an important additional responsibility of the group. The computer manager will be expected to interact with her/his counterparts at the EMBL outstations at Grenoble, Hamburg and Cambridge. Applicants should have substantial experience managing and integrating a heterogeneous computing environment. Specific expertise in VMS system management and networking is required. The ability to articulate proposals for system development and to conduct effective negotiation with external bodies would be advantageous.

EMBL offers a competitive salary and help with relocation expenses. Applications are invited from nationals of the Member States of EMBL. As an inclusive international research organization EMBL encourages applications from women and nationals of southern European or other currently underrepresented Member States.

The closing date for applications is **January 1st, 1994.**

Please send your CV, or write to the Personnel Selection for an application form, quoting ref. 93/31.

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



1994 Summer Courses at the MARINE BIOLOGICAL LABORATORY

Biology of Parasitism: Modern Approaches (June 12-August 13)

This course, for students, postdocs, and faculty focuses on the molecular basis of parasite function and the host/parasite interaction, with special emphasis on the most recent and exciting developments in this area. The course has four sections: cell biology, immunology, molecular biology, and biochemistry. Each section includes daily lectures from course faculty and outside speakers, and intensive laboratory experimentation. Limited to 20 students.

Director: Stephen L. Hajduk, University of Alabama at Birmingham

Embryology: Cell Differentiation and Gene Expression in Early Development (June 15-July 29)

An advanced level course intended for graduate students, postdoctoral fellows, and other research scientists who wish a current treatment of major issues in the experimental analysis of developmental biology of the embryo, and the diverse intellectual approaches now useful in this field. Limited to 24 students.

Directors: Eric H. Davidson, California Institute of Technology; Michael Levine, University of California, San Diego; and David R. McClay, Duke University

Microbial Diversity (June 12-July 28)

An intensive laboratory and lecture course intended for graduate or postdoctoral students as well as established investigators who desire to become competent in microbiological techniques for isolating and working with a broad range of microbes. Microbial diversity will be described and analyzed in biochemical and physiological terms. Limited to 20 students.

Directors: Martin Dworkin, University of Minnesota; and John Breznak, Michigan State University

Neural Systems and Behavior (June 12-August 5)

Intended for graduate and postdoctoral students as well as established investigators. The central theme of this course is the neural bases and ontogeny of behaviors. Twenty students participate in intensive laboratories/lectures which combine state-of-the-art neurobiological techniques with behavioral and developmental analyses.

Directors: Ronald Calabrese, Emory University; and Martha Constantine-Paton, Yale University

Neurobiology (June 12-August 13)

For 12 pre- and postdoctoral fellows who intend to work in cellular and molecular neurobiology. Postdoctorals and students at an advanced stage of their graduate training are particularly encouraged to apply. The themes will be the functions of neural cells, the molecules involved in these functions, and the organization of molecular components required to generate cellular activity.

Directors: Leonard K. Kaczmarek, Yale University; and Irwin Levitan, Brandeis University

Physiology: Cellular and Molecular Biology (June 12-July 23)

For a class of 36 graduate students, postdoctoral fellows, and established investigators who desire training in a broad range of research strategies in genetics, physiology and cell and molecular biology. Recent college graduates on their way to graduate school and physicians reentering laboratory research are also encouraged to apply. Interested students may apply for two weeks of postcourse research starting July 25.

Director: Mark Mooseker, Yale University

Application Deadline: March 1, 1994

Partial financial aid is available to qualified applicants.

CONTACT: Admissions Coordinator
Office of Sponsored Programs • Marine Biological Laboratory
Woods Hole, MA 02543 • (508) 548-3705, x401

POSITIONS OPEN

POSTDOCTORAL POSITION IN RADIOBIOLOGY

Immediate opening to study the structure and function of DNA polymerase β . Candidates familiar with molecular and cellular biology should send curriculum vitae and names of three references to: **Joann B. Sweasy, Ph.D., Department of Therapeutic Radiology, Yale University School of Medicine, 333 Cedar Street, P.O. Box 3333, New Haven, CT 06510. (FAX: 203-785-6309).** Yale University School of Medicine is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

VISITING FELLOW PROGRAM CHERRY L. EMERSON CENTER FOR SCIENTIFIC COMPUTATION EMORY UNIVERSITY

The Emerson Center offers a Visiting Fellow Program to people who have permanent positions in other institutions and would like to spend one month to one year in the Center using its large workstation cluster to perform research in computational chemistry and physics. Stipend and/or travel expenses are available. Collaboration with Emerson Center "subscribers" in chemistry and physics departments is encouraged. The deadline for 1994-95 academic year is February 1, 1994. However, an earlier application is strongly recommended. For details contact: **Keiji Morokuma, Director, Cherry L. Emerson Center for Scientific Computation, 1515 Pierce Drive, Atlanta, GA 30322.** It is the policy of Emory University that discrimination against any individual for reasons of race, color, national origin, religion, sex, age, disability, or veteran status is prohibited.

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE POSITIONS CENTER FOR GENE THERAPY BAYLOR COLLEGE OF MEDICINE

Postdoctoral/Research Associate positions are available in the Center for Gene Therapy at Baylor College of Medicine, which is supported by NIH-funded program project grants entitled "Gene Therapy for Hepatic Deficiencies" and "Gene Therapy for Cardiovascular Diseases." The project areas are (1) development of recombinant viral vectors and DNA-based vectors for hepatic, endothelial and muscle gene delivery and (2) application of vector technologies to treat existing animal models of human diseases such as phenylketonuria, hemophilia b and atherosclerosis. Salary is commensurate with research experience and Baylor is an Equal Opportunity Employer. Applicants must have a Ph.D. and/or M.D. Applications should be sent with updated curriculum vitae to:

Savio L. C. Woo, Ph.D.
Director, Center for Gene Therapy
Baylor College of Medicine
One Baylor Plaza, Room T721
Houston, TX 77030

The Krasnow Institute for Advanced Study George Mason University

Announcing the Krasnow Outreach POSTDOCTORAL FELLOWSHIPS IN THE COGNITIVE DISCIPLINES Starting September 1994

These one-year fellowships, with the possibility of renewal, must be under the supervision of a mentor who is recognized for excellence in research in the cognitive disciplines (neurobiology, computational approaches, cognitive psychology, and related disciplines).

The fellows will be in residence at the Krasnow Institute for a minor fraction of the year and at the institutions of the mentors for the rest of the year. The mentors will on occasion visit George Mason University to assist in integrating and networking the effort. They will be External Scholars of the Krasnow Institute. The intent of the program is to provide an intellectual intersection of the various cognitive disciplines and a locus of interaction in a more tangible sense.

The application for a fellowship should be initiated by a letter from the mentor.

Harold J. Morowitz
Director, Krasnow Institute
207 East Building
George Mason University
Fairfax, VA 22030-4444

POSITIONS OPEN

POSTDOCTORAL POSITION—Protein Cleavage with Metal Chelates. Available immediately, to study new approaches to mapping functional sites on proteins. Candidates with a strong background in protein chemistry and molecular biology are encouraged to apply. Send curriculum vitae, description of research interests and experience, and arrange for three letters of recommendation to be sent to: **Prof. Claude F. Meares, Chemistry Department, University of California, Davis, CA 95616-0935. FAX: 916/752-8938. Email: cfmeares@ucdavis.edu.**

POSTDOCTORAL SCIENTIFIC RESEARCH OPPORTUNITIES IN INDIA. 3 to 12-month fellowships in India awarded to U.S. citizens in 1993-94. For more information, contact: **Jeanine Marie Greene, Academy for Educational Development, 1255 23rd Street, N.W., Washington, DC 20037, or 1-800-545-8007.**

SENIOR RESEARCH ASSOCIATE: Requirements—Ph.D. Major—Biostatistics/epidemiology; Experience—2 years in job or health policy/services research; knowledge of statistical computer systems, community-based research to design, conduct and supervise research projects using computer software programs and statistical methods in the area of health care outcome measures, HIV prevention, drug treatment, health education and policy. 37.5 hours per week, 8:30 a.m. to 5:00 p.m., \$39,000 per year. Résumé to: **Philadelphia Job Bank, 444 North 3rd Street, 3rd Floor, Philadelphia, PA 19123. J.O. #4541825.**

RESEARCH ASSISTANT— PULMONARY RESEARCH LAB

Regular part-time position. Extensive knowledge of cell cultures/gel electrophoresis, ELISA, and radioisotopes. Bachelor's or Master's degree in a Biological Science required with 3 plus years of experience; extremely competent in Western blotting, cell culture immunofluorescence; confocal microscopy experience desired. Please send résumé and salary history to: **Children's Hospital of Orange County, 455 South Main Street, P.O. Box 5700, Orange, CA 92613-5700, Attention: Personnel.**

RESEARCH ASSOCIATE/ ASSISTANT SCIENTIST Krannert Institute of Cardiology Indiana University School of Medicine

A position is available at the Assistant Scientist level. The candidate must have postdoctoral experience in molecular biology with particular expertise in protein expression and construction of mutant and/or chimeric proteins. Work will involve research on selected enzymes of the vascular wall. Please send curriculum vitae to:

David R. Hathaway, M.D.
Director, Cardiovascular Division &
The Krannert Institute of Cardiology
Indiana University School of Medicine
1111 West 10th Street
Indianapolis, IN 46202-4800

Indiana University is an Equal Opportunity/
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RESEARCH ASSOCIATE

Research Associate available in Neurosurgery Department for tissue culture research project involving the preparation and characterization of human monoclonal antibodies to human tumors. Master's, Ph.D. or equivalent in health sciences, preferably biology or biochemistry with at least 5 years of research lab experience required. Ph.D. or equivalent in immunology or medical oncology with minimum of 3 years of experience in tissue culture and monoclonal antibody production desired. Proven experience using computers to generate scientific publications and to perform data analysis and research applications helpful. Salary commensurate with qualifications.

Send curriculum vitae with references to: **Michael D. Dan, M.D., Ph.D., Louisiana State University Medical Center, Department of Neurosurgery, 1542 Tulane Avenue, New Orleans, LA 70112. LSUMC is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

FIVE POSTDOCTORAL RESEARCH projects available at the National Center for Toxicological Research near Little Rock, Arkansas. Four projects require a strong background in the use of and interpretation of results from general instrumental techniques: analytical HPLC, capillary GC-FTIR, and GC-MS. One project is oriented toward mass spectrometry, including LC-MS and/or pyrolysis mass spectrometry. Degree in analytical chemistry or related sciences received within last three years preferred. Contact: **Postgraduate Research Program/NCTR, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117, Telephone: (615) 576-3190.**

POSTDOCTORAL RESEARCH at Department of Energy Pittsburgh Energy Technology Center—immediate opening. Project involves research in catalytic chemistry of coal liquefaction. Coal and model compounds relevant to coal structures will be used as substrates. Experience in catalysis and/or catalysts preparation preferred. Degree in chemistry within last three years and U.S. citizenship are required. For information contact: **Fossil Energy Postgraduate Program, Science Engineering Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117; Telephone: (615) 576-3456.**

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.**

SURGICAL CRITICAL CARE

The Department of Surgery at Duke University Medical Center is seeking to hire a **RESEARCH ASSOCIATE** or **RESEARCH SCIENTIST** to conduct studies related to the molecular mechanisms in critical illness and sepsis. Applicants should have a strong background in molecular biology and microbiology. They should have expertise in recombinant DNA technology, Southern, Northern and Western analyses, PCR techniques for the evaluation of DNA and messenger RNA, and tissue and bacterial culture. This individual will interact with other basic scientists and clinicians involved in basic and clinical studies. Additionally, this individual would work closely with and help direct research fellows in the basic laboratory. Contact: **Dr. R. Lawrence Reed at (919) 681-5080. Duke University is an Equal Opportunity Employer.**

R.S. DOW NEUROLOGICAL SCIENCES INSTITUTE

*Basic discoveries of the nervous system
leading to innovative patient care*

NEUROBIOLOGIST. The R.S. Dow Neurological Sciences Institute is opening a new position in the field of subcellular and cellular neurobiology. The Institute is committed to a strong interdisciplinary research environment. Candidates with research interests in the fields of biochemistry, molecular biology, pharmacology, cell biology are encouraged to apply. Generous start-up funds, equipment and laboratory space are available. Level of appointment will depend upon research accomplishments.

Candidates should submit curriculum vitae, three letters of reference, and a brief statement of research goals by November 30, 1993, to: **Neurobiology Search Committee, R.S. Dow Neurological Sciences Institute, 1120 N.W. 20th Avenue, Portland, OR 97209.**

AMERICAN MUSEUM OF NATURAL HISTORY
Director of the
Center for Biodiversity & Conservation

The American Museum of Natural History seeks a Director for its new Center for Biodiversity and Conservation. The Director will establish program priorities and direction for a Center that connects the Museum's powerful research program in biodiversity and related environmental sciences to important issues concerning global environmental change and conservation.

The Center will draw upon activities of the Museum's curatorial staff as well as related functions in the Museum's Departments of Education, Exhibition, Development and Public Affairs. This coordinated program will foster communication and advisement as well as collaborative projects with other institutions and with government and non-government agencies.

Candidates should have a Ph.D. or comparable qualifications in an area related to environmental biology (e.g., systematics, ecology, forestry, wildlife biology, etc.) as well as demonstrated record of leadership and effectiveness in relating research a demonstrated record to conservation issues of public concern. Candidates are sought who have knowledge and experience concerning the global activities of various conservation organizations as well as governmental environmental policy.

The American Museum of Natural History has for nearly 125 years promoted an understanding and appreciation of the natural world. It houses the largest Library of natural history in the western hemisphere as well as a collection of over 30 million specimens and artifacts. The Institution sponsors over 200 curators, scientific support staff, doctoral students and postdoctoral fellows, many of whom conduct research in biodiversity and other environmental sciences.

Applicants should submit a brief cover letter stating their qualifications for the directorship of the Center, a curriculum vitae, a statement of activities, salary requirements, and the names and addresses for three letters of recommendation. Materials should be sent to: Dr. Michael Novacek, Dean of Science, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192.

The deadline for receipt of applications is December 31, 1993.

AN EQUAL OPPORTUNITY EMPLOYER.



Dean, School of Medicine
Virginia Commonwealth
University

Virginia Commonwealth University, a state-supported institution located in Richmond, Virginia, invites nominations and applications for the position of Dean of the School of Medicine. The Dean reports directly to the Vice President for Health and Sciences and is responsible for supervising the operation and programs of the School of Medicine, maintaining their quality, accountability, fiscal stability and accreditation standards.

All candidates should have an M.D. or equivalent degree, scholarly achievement qualifying for the rank of professor with tenure, demonstrated academic administrative experience and abilities, an understanding of health policy issues and evidence of leadership in teaching, patient care, research and public service.

The University and its Health Sciences Center is a comprehensive urban, public institution enrolling approximately 20,000 students. VCU is composed of 11 schools and one college on two campuses. The Medical College of Virginia is located in downtown Richmond and includes the Schools of Medicine, Dentistry, Pharmacy, Nursing and Allied Health Professions as well as the 1,058-bed Medical College of Virginia Hospitals. There are more than 700 full-time faculty, 3,000 students, and 550 resident physicians on campus.

Letters of nomination are welcome. Full applications should include a curriculum vitae and the names, addresses and telephone numbers of four references. Virginia Commonwealth University is an Affirmative Action/Equal Opportunity Employer. Women, minorities and persons with disabilities are encouraged to apply. Applications will be accepted until December 16, 1993. Please address all correspondence to:

John E. Jones, M.D.
 Co-Chairman
 Dean of Medicine Search Committee
 Virginia Commonwealth University
 Box 549
 Richmond, VA 23298-0549

DEVELOPMENTAL BIOLOGIST
Assistant Professor (Tenure-track)

The Faculty of Biological Science, University of Tulsa, invites applications for the position of Assistant Professor of Developmental Biology, employment to begin Fall Term, 1994. Outstanding candidates from all areas of developmental biology will be considered; however, individuals exploiting transgenic technologies are especially encouraged to apply.

The University of Tulsa is a comprehensive, private university that emphasizes excellence in teaching and research. The Faculty of Biological Science currently consists of 16 members with diverse research interests and offers B.S., M.S. and Ph.D. degrees. The department has a fully staffed vivarium and transgenic mouse facility available for faculty use. Salary and start-up funds will be competitive.

The successful candidate will have a Ph.D., a commitment to excellence in undergraduate and graduate education, post-doctoral experience and a publication record indicative of the ability to establish an independent, externally-funded research program.

Applicants should submit a Curriculum Vitae, a statement of teaching and research interests, several recent reprints and arrange to have three letters of reference sent to: Chair, Developmental Biologist Search Committee, Faculty of Biological Science, The University of Tulsa, 600 S. College Ave., Tulsa, Oklahoma 74104-3189. Review of applications will begin December 1, 1993, and continue until the position is filled.

The University of Tulsa is committed to diversifying its faculty and staff. Members of historically underrepresented groups are encouraged to apply. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.

Arthropod Systematist

The University of California at Berkeley invites applications for a tenure-track position as Assistant Professor with concurrent appointment in the Agricultural Experiment Station. The position will be based in the Department of Environmental Science, Policy and Management. The appointment will be for 9 months with salary and step within rank dependent on experience and qualifications. The position will be available July 1, 1994.

The appointee will be expected to develop research in arthropod systematics that emphasizes using molecular data to develop phylogenetic hypotheses and classifications.

Applicants must have earned a doctoral degree in a field appropriate for the research area. The successful candidate should have a strong background in molecular techniques and data analysis for application to insect systematics. Teaching experience is desirable, and duties will include developing undergraduate and graduate courses in systematic entomology emphasizing theory and molecular methodology. Responsibilities will include graduate seminars and training graduate students.

Interested persons should apply by submitting a résumé, statement of research interests, list of publications, and the names and addresses of three references. Applications must be received by January 31, 1994.

Jerry A. Powell,
 Chair of Search Committee
 Department of Environmental Science
 Policy and Management (ESPM)
 201 Wellman Hall
 University of California
 Berkeley, CA 94720.

MONTANA STATE UNIVERSITY
Postdoctoral Positions in
Structural Biology
of Signaling and Adhesion Systems

A cooperative program studying molecular mechanisms of protein-protein interactions which control a variety of membrane signalling and adhesion systems funded by NSF EPSCOR. Approaches include mapping peptides on interaction interfaces, NMR structures of bound peptides (transferred-NOESY), photaffinity labeling and mass spectrometric analysis. Programs include:

Edward A. Dratz, G protein-coupled receptors, NMR structure determination and refinement, *Nature* **363**: 276-281 (93).

Jean R. Starkey, Adhesion mechanisms in cancer metastasis, laminin receptor structure/function, *J.B.C.* **267**: 25120-8 (92).

Algirdas J. Jesaitis, Leukocyte chemotactic receptors, G protein-actin interaction, *J.B.C.* **267**: 7576 (92); *J. Leuk. Biol.* **34** Dec (93).

David M. Dooley, Protein structure/function, subunit interactions and active site reactivity, *J.A.C.S.* **112**: 2782-2789 (90).

Jan Sunner, Soft ionization mechanisms in mass spectrometry (FAB, ES and LDTF), *J. Org. Mass Spectrom.* **28**: 805-825 (93).

Mark T. Quinn, Interactions of components of the neutrophil NADPH oxidase including small G proteins, *J.B.C.* **267**: 7303-9 (92).

Mark A. Jutila, Leukocyte and endothelial cell adhesion molecules, selectin structure/function, *J. Exp. Med.* **175**: 1565-1573 (92).

Martin Teintze, Membrane protein insertion, CF conductance regulator, HIV gp120-CD4 interaction, *Biophys. J.* **62**: 54-55 (92).

Keith Parker, Dept. of Pharm. Sci., U of MT, Missoula, Serotonin receptors in migraine, *Eur. J. Pharmacol.* **227**: 153-163 (92).

Requires Ph.D. in related area, evidence of research originality and ability in communication. Screening begins December 1, 1993. To apply, send a letter describing background and future goals, include a CV and three references to: Receptor Research Group, 108 Gaines Hall, Montana State University, Bozeman, MT 59717. ADA/EO/AA/Vet. Pref.

12 November 1993 Issue
Cover Story in SCIENCE

MINORITIES IN SCIENCE

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Space Reservation Deadline: Tuesday, October 26

HEAD, DEPARTMENT OF CHEMISTRY QUEEN'S UNIVERSITY

Queen's University at Kingston invites applications from outstanding scholars for a tenure-track position as Head of the Department of Chemistry, effective July 1, 1994 (or as negotiated).

The successful candidate will have outstanding leadership skills and an exceptional record as a teacher, scientist and administrator.

The Department of Chemistry currently has 28 full-time faculty members, 21 staff, and vigorous graduate and undergraduate programmes. Significant development opportunities in the Department include:

- (1) Staffing the Bader Chair, a newly endowed Chair in Organic Chemistry;
- (2) Building a Department in which 50% of present faculty retire over the next 10 years;
- (3) Building an interdisciplinary programme in Environmental Science based in the natural science disciplines, with the potential for future linkages with social science departments.

The appointment will be at the rank of Professor with salary commensurate with qualifications and experience.

Applications should be accompanied by a curriculum vitae and the names of three referees. The closing date for applications is January 31, 1994. Please send applications to:

Dr. Laureen Snider, Chair
Advisory Committee for the Headship of the
Department of Chemistry
Faculty of Arts and Science
Queen's University
Kingston, Ontario
K7L 3N6

Queen's University has an employment equity programme and encourages applications from all qualified candidates including women, aboriginal peoples, people with disabilities, and visible minorities. The University is willing to help the spouse of a new appointee to seek suitable employment. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

CALL FOR PREPROPOSALS

The United States - Mexico Foundation for Science, a private, non-profit organization headquartered in Mexico City, invites preproposals for its second round of grant-making.

The United States - Mexico Foundation for Science supports binational, laboratory or field directed research activities of collaborating scientists, engineers, and other researchers from non-profit institutions from the two countries. Grants are awarded for a maximum of two years, at US\$50,000 per year. Areas of emphasis are the environmental, health, and social and economic sciences relating to the closer integration of the two societies, especially in relation to the proposed North American Free Trade Agreement. Other areas of support include biology, chemistry, earth and marine sciences, mathematics, and physics. Preproposals of exceptional merit in these other areas will be considered if funds are available.

Preproposals will not be accepted in agriculture, clinical medicine, and marketing, or for on-going research. Also, persons serving in the capacity of Review Coordinator for the Foundation may not submit a preproposal for review under the module for which they are the Review Coordinator.

Preproposal Submission Date and Address

Preproposals in either Spanish or English must be submitted jointly by principal investigators from both the United States and Mexico, and must not exceed 4 single spaced, typewritten, standard (8.5 x 11 inch) pages. Preproposals, without exception, must be received at the following address on or before January 15, 1994:

Dr. Gerardo Bueno
Director Ejecutivo
Fundación México - Estados Unidos para la Ciencia
Av. Contreras 516, 2o Piso
San Jerónimo Lídice
10200 México, D.F.
Fax: 011/52/5/683-7010

For details concerning submission format, please contact the above address. In the United States, an alternate contact address for information purposes only is as follows: Dr. Jill Conley, BOSTID, FO 2060, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418, fax: 202-334-2027.

Note: DO NOT submit preproposals to the US address.

ANNOUNCEMENT

Educational Loan Repayment

❖ The biomedical research community is familiar with the number of grants and contracts awarded by the **National Institutes of Health (NIH)** to researchers throughout the country. However, in fiscal year 1994, approximately 15% of our \$1.3 billion HIV/AIDS budget will be devoted to research activities conducted intramurally at NIH's 306 acre campus in Bethesda, Maryland.

❖ Located close to the center of Washington, D.C., the NIH employs more than 4,000 doctoral level scientists (Ph.D.'s, M.D.'s, D.D.S.'s, D.M.D.'s, D.V.M.'s, and D.O.'s). NIH's 500-bed Clinical Center is home to more than half the research beds in the country.

❖ The NIH offers a loan repayment program (LRP) for researchers and physicians—who agree to join our HIV/AIDS research team for a minimum of two years. Depending on your total debt, we can repay up to \$20,000 per year of your educational debt and provide partial reimbursement for Federal (39% of loans repaid), State and local tax liabilities. All LRP benefits are in addition to attractive Federal salaries and associated benefits.

❖ The NIH provides exceptional training opportunities in basic, behavioral and clinical research. The following are some examples of the HIV/AIDS research projects in which our LRP

participants are engaged: *a molecular analysis of the viral burden in blood and lymphoid tissue of HIV-infected individuals on antiretroviral agents; the design and synthesis of synthetic peptide polymers for the production of anti-HIV vaccines; and the development of a prokaryotic expression system for the Tax protein and the establishment of Tax affinity columns.*

❖ More than 70 researchers and physicians have benefitted from the NIH's LRP for AIDS Research since its inception in FY 1990. Our ability to make accelerated repayments has enabled us to significantly reduce the educational debt burden of our participants and prevented the accrual of large amounts of interest, allowing them to pursue biomedical research careers.

❖ Telephone the LRP InfoLine, 24-hours a day toll-free, at 800-528-7689, to obtain our recently updated *Applicant Information Bulletin* and our *User's Guide to the NIH EDNET*, an electronic bulletin board listing NIH's postdoctoral training opportunities.



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U.S. Department of Health and Human Services

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POSITIONS OPEN

TUMOR BIOLOGIST

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

MOLECULAR GENETICIST

The Department of Biology at Occidental College invites applications for a tenure-track position for a Molecular Geneticist. Applicants should have a strong commitment to teaching at the undergraduate level and to research. The successful candidate will normally teach courses in genetics and biochemistry. S/he is expected to develop a rigorous research program involving undergraduates. The exact area of research is open. The new faculty member will have the opportunity to participate in the Cell and Molecular Biology Emphasis and to be involved in the interdisciplinary Biochemistry major. Occidental College is a selective, small liberal arts college with excellent research and teaching facilities, located in Los Angeles. It is also a nationally recognized leader in multicultural education. Send curriculum vitae, statement of your research and teaching interests, copies of significant publications, and arrange to have three letters of reference sent, by December 8, 1993, to: **Dr. Roberta Pollock, Department of Biology, Occidental College, 1600 Campus Road, Los Angeles, CA 90041. Occidental College is an Equal Opportunity/Affirmative Action Employer. Women and people of color are particularly encouraged to apply.**

ANNOUNCEMENTS

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

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

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

COURSES AND TRAINING

APPLIED MOLECULAR BIOLOGY

The University of Maryland Baltimore County is accepting applications for its unique 2-year M.S. Program in Applied Molecular Biology. Designed to provide the coursework, practical laboratory experience, and research internships for positions in biotechnology or research requiring state-of-the-art molecular technology. Information and applications: **Department of Biology, U.M.B.C., Baltimore, MD 21228-5398. Telephone: (410) 455-3669. Equal Opportunity University.**

SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY

January 10–14, 1994, Baltimore, Maryland
Center for Fluorescence Spectroscopy
University of Maryland School of Medicine

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

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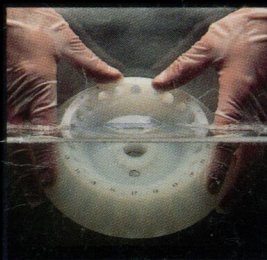
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