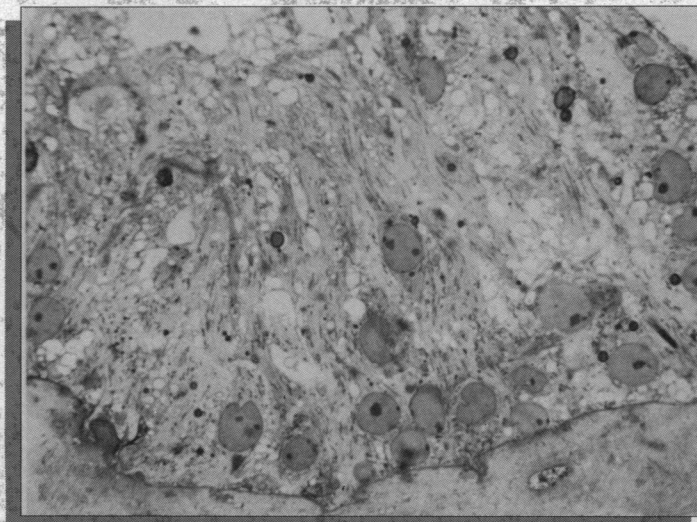


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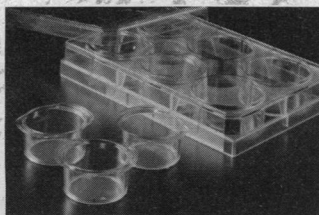


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STEDMAN'S/25 PLUS spell-checker software contains 200,000 medical and pharmaceutical terms and phrases. An upgrade of the 165,000-term program STEDMAN'S/25 FOR WORDPERFECT, it offers WordPerfect 5.1 DOS users a

unique capitalization feature that provides accurate spell-checking of eponyms, trade names, abbreviations, and chemical symbols. The dictionary has been merged with the WordPerfect main dictionary, so the installation procedure simply replaces the WordPerfect main dictionary with the enhanced dictionary. It is compatible with WordPerfect 5.0 and above for DOS, WordPerfect Windows 5.1, and WordPerfect 2.0 and above for the Macintosh. Williams & Wilkins Electronic Media. Circle 93.

Literature

1993 *Sigma Cell Culture Catalog* contains more than 200 new products in media, sera, and cell culture-tested reagents. Product areas include hybridoma culture, insect cell culture, and plant cell culture. Sigma Cell Culture Reagents. Circle 94.

Thin Layer Chromatography: An Introduction gives a concise historical, theoretical, and practical introduction to modern planar chromatography. EM Science. Circle 95.

Paragon Supercomputers gives details of this new line. Intel Corp. Circle 96.

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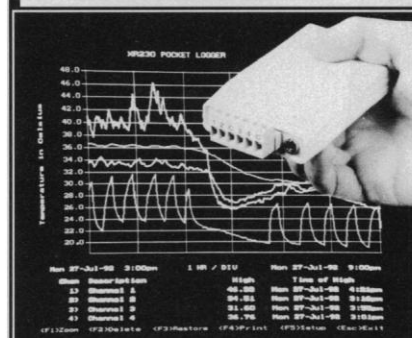
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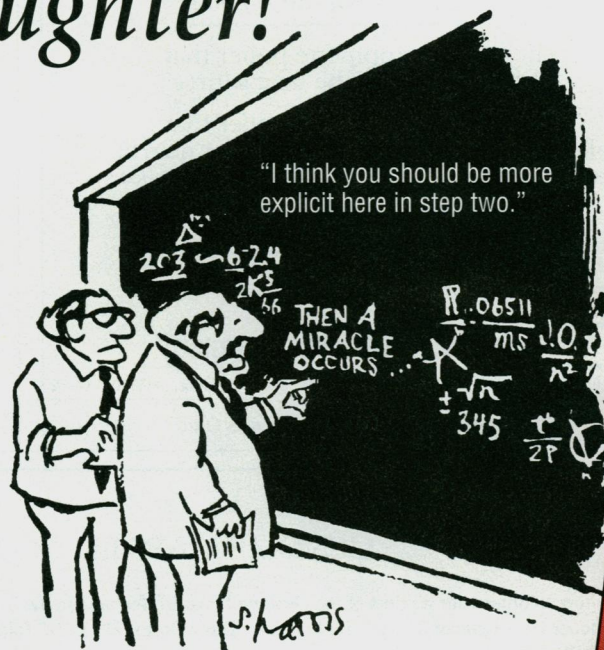


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1993-94 Congressional Science and Engineering Fellowships

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

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

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

SPONSORS: Approximately twenty national professional scientific and engineering societies will sponsor or cosponsor Congressional Science and Engineering Fellows in 1993-94:

Acoustical Society of America
American Association for the Advancement
of Science
American Chemical Society
American Geophysical Union
American Institute of Biological Sciences
American Institute of Physics
American Physical Society
American Psychological Association
American Society for Agronomy/Crop Science
Society of America/Soil Science Society
of America/Weed Science Society of
America and regional affiliates

American Society for Horticultural Science
American Society for Microbiology
American Society of Mechanical Engineers
American Society of Plant Physiologists
American Society of Zoologists
American Veterinary Medical Association
Biophysical Society
Federation of American Societies of Food
Animal Sciences
Geological Society of America
Institute of Electrical and Electronics Engineers
Office of Technology Assessment

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

Congressional Science and Engineering Fellowship Program
American Association for the Advancement of Science
1333 H Street, NW, Washington, DC 20005

Minorities and persons with disabilities are encouraged to apply.

SCIENCE

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POSITIONS OPEN

The Biology Department at Troy State University (TSU) in Troy, Alabama is seeking an **ASSISTANT PROFESSOR OF BIOLOGY**. This is a tenure-track position beginning January 1993. Earned doctorate and a strong commitment to undergraduate teaching is required. The successful candidate must have the ability to teach parasitology, embryology, comparative invertebrate zoology, comparative vertebrate zoology, principles of biology, and principles of zoology. The review of applications will begin by October 23, 1992 and will continue until the position is filled. Send letter stating teaching philosophy, résumé, undergraduate and graduate transcripts and three letters of reference to: **Office of Personnel Services, Troy State University, Troy, AL 36082.** TSU is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

FACULTY POSITION IN BIOSTATISTICS

Department of Biomedical and Environmental
 Health Sciences
 School of Public Health
 University of California, Berkeley 94720

A tenure-track position in Biostatistics will be available beginning Fall 1993 at the **ASSISTANT PROFESSOR** level, pending budgetary approval. Applicants should possess a strong background in both theoretical and applied biostatistics and will be expected to develop an in-depth research program. Duties will include developing and teaching upper division and graduate level courses in addition to directing graduate student research. A Ph.D. in Biostatistics or a related field is required. Applications must be submitted before January 15, 1993. Send curriculum vitae, list of publications, and names and addresses of five individuals who may be contacted for reference to:

Steve Selvin, Chairman, Search Committee
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ASSISTANT PROFESSOR position open at **THE SALK INSTITUTE** in the Clayton Foundation Laboratories for Peptide Biology. We are seeking a Ph.D./M.D. researcher with interests in neural or endocrine development and mechanisms of growth factor action. Familiarity with gene knockout technology is desirable but not essential. Our department includes investigators with diverse interests in neuroendocrine systems, cellular signaling, transcriptional regulation and peptide and protein biochemistry. Qualified candidates should send curriculum vitae, description of research interests, reprints of selected publications, and the names and addresses of three references to: **Wylie Vale, Head, The Clayton Foundation Laboratories for Peptide Biology, The Salk Institute for Biological Studies, 10010 North Torrey Pines Road, La Jolla, CA 92037.**

The Salk Institute is an Equal Opportunity Employer.

BUCKNELL UNIVERSITY ASSISTANT PROFESSOR OF BIOLOGY

Anticipated three-year temporary position beginning Fall 1993. Applicant should possess a strong interest in teaching of science, pedagogical research, and creative teaching of introductory courses, including both plant and animal sciences. Opportunity to teach upper-division courses in applicant's area of interest also exists. Ph.D. and teaching experience required. Successful applicant will be expected to establish an active research program. Applicants should forward curriculum vitae, statement of research interest, evidence of teaching effectiveness, and three letters of recommendation to: **Dr. Sally Nyquist, Chair, Department of Biology, Bucknell University, Lewisburg, PA 17837.** Closing date for applications: November 15, 1992. *Women and members of minority groups encouraged to apply.*

POSITIONS OPEN

MOLECULAR GENETICIST

The Department of Biology at Virginia Commonwealth University invites applications for a tenure-track **ASSISTANT PROFESSOR** position. Teaching responsibilities will include undergraduate genetics and, periodically, upper/lower-level courses in the candidate's area of specialty. Candidates must hold a Ph.D. in genetics or a closely related discipline; postdoctoral experience is preferred. The successful candidate will be expected to develop an externally funded research program in an area of molecular genetics complementary to existing environmental and plant genetics research programs. Virginia Commonwealth University is a culturally diverse institution with an enrollment of 22,000 students. The Biology Department includes 26 faculty members and has a M.S. graduate program. Submit curriculum vitae, selected reprints, statements of research and teaching interests, and three letters of recommendation by 21 December 1992 to: **Dr. John F. Pagels, Department of Biology, Virginia Commonwealth University, Richmond, VA 23284-2012.** *Virginia Commonwealth University is an Equal Employment Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.*

ADJUNCT ASSISTANT PROFESSOR/ ASSISTANT RESEARCH SCIENTIST

The Department of Internal Medicine, College of Medicine is seeking an Adjunct Assistant Professor/Assistant Research Scientist to supervise a Lipid Research Laboratory. This person will participate in NIH-supported research related to understanding the importance of various risk factors for atherosclerosis and the contribution of the LDL receptor-related protein to lipoprotein metabolism. He/She will be encouraged to develop his/her own R01-level research program, and must have a Ph.D. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Please send résumé to: **Darris Goerd, Administrator, Department of Internal Medicine, SE318 GH, University of Iowa Hospitals & Clinics, Iowa City, IA 52242.**

ENVIRONMENTAL TOXICOLOGIST

The Department of Biological Sciences, Wichita State University (WSU), invites applications for a tenure-track position with the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. We seek an individual with broad training in toxicology and biology/ecology who uses a cell or molecular approach to perform research in environmental toxicology. Abundant opportunities exist in the region for groundwater and aquatic studies. The applicant must possess significant postdoctoral training, a record of productive research, and the ability to interact collegially. Appointment at the Associate level requires a record of funded research activity. Expectations also include teaching at both the undergraduate and graduate levels and participation in training in multidisciplinary environmental sciences at the graduate level. Deadline for applications is November 30, 1992 or the first of the month until the position is filled. Send curriculum vitae, statement of research and teaching goals, and three names of references to: **Chairperson, Environmental Toxicologist Search Committee, Department of Biological Sciences, Wichita State University, Wichita, KS 67208.** *WSU is an Affirmative Action/Equal Opportunity Employer.*

ECOLOGIST. The Department of Biology at New Mexico State University (NMSU) anticipates appointing a tenure-track **ASSISTANT PROFESSOR** for Fall 1993. Applicants should apply modern methods (quantitative, experimental, and/or molecular) to research problems in animal ecology. The successful candidate will join an interactive group of ecologists and is expected to develop a vigorous research program and to teach at the undergraduate and graduate levels. The department offers bachelors degrees in biology and microbiology, and the M.S. and Ph.D. in biology. Submit curriculum vitae, concise statement of teaching and research interests, and names, addresses, and telephone numbers of at least three references to: **Dr. William J. Boecklen, Search Committee, Department of Biology, Box 30001, NMSU, Las Cruces, NM 88003.** Closing date for applications is November 23, 1992. *NMSU is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORS NEUROSCIENCES

CASE WESTERN RESERVE UNIVERSITY

The Department of Neurosciences at Case Western Reserve University School of Medicine has two tenure-track openings for junior faculty to be appointed at either the assistant or associate professor level. Candidates at the entry level should have at least two years of postdoctoral research experience and be ready to start their own independent research programs. Teaching duties primarily involve lecturing on neurosciences to graduate and medical students. One position is for a person studying neuronal interactions in the vertebrate CNS, with the goal of understanding how neural circuits control behavior. Applications from individuals using *in vitro* preparations and multidisciplinary approaches are particularly encouraged. The other position is for a person studying biochemical mechanisms of signal transduction in the nervous system. For example, the regulation of second messenger systems, posttranslational modification of proteins, and modulation of gene expression. The department includes 11 primary faculty and will expand to 15 over the next several years. Also, more than 15 neuroscientists from other departments play an active role in research and teaching. Interested candidates should submit curriculum vitae and a brief summary of research plans by January 1, 1993 and should arrange for four letters of reference to be sent to: **Dr. Story Landis, Search Committee, Department of Neurosciences, Case Western Reserve University Medical School, 10900 Euclid Avenue, Cleveland, OH 44106-4975.** *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

EVOLUTIONARY GENETICIST and ENVIRONMENTAL MICROBIOLOGIST. The University of South Florida (USF) and the Department of Biology has two full-time, 9 month tenure-track positions at the level of **ASSISTANT or ASSOCIATE PROFESSOR.** Candidates need a Ph.D. and postdoctoral research experience; are expected to train graduate students and establish research programs that are molecularly-oriented and externally-funded. Teaching will be undergraduate genetics or microbiology and in specialty graduate courses. Intra- and interdepartmental collaboration is facilitated through the Institute for Biomolecular Science and the Center for Urban Ecology. Title and salary will be commensurate with qualifications. USF is a comprehensive research and teaching university. The Department is multidisciplinary with 35 faculty members. Applicants should forward a letter of intent, curriculum vitae, reprints, statements of research and teaching interests, and should arrange for 3 letters of recommendation to be forwarded. Deadline for receipt of all materials is December 18, 1992. Address materials to Chair of the appropriate Search Committee: **Department of Biology, University of South Florida, Tampa, FL 33620-5150.** Positions are contingent upon funding. *USF is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women. If accommodation because of a disability is required to participate in the application/selection process, notify the Chair in advance.*

TENURE-TRACK FACULTY POSITIONS VISUAL SCIENCES

DEPARTMENT OF ANATOMY AND CELL BIOLOGY

The Department of Anatomy and Cell Biology, Texas College of Osteopathic Medicine (TCOM), has openings for two (2) tenure-track faculty positions at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D. or equivalent degree, postdoctoral experience, and the potential to develop an extramurally funded research program complementary to a growing multidisciplinary program in the visual sciences. Preference will be given to individuals with expertise in electrophysiology, molecular biology, cellular immunology, or developmental biology of ocular tissues. Teaching responsibilities will be at the medical and graduate school level with teaching interests in embryology and/or gross anatomy desirable, but not a prerequisite. A competitive salary, generous start-up funds, modern laboratory space, and outstanding research support facilities are available.

Qualified applicants should send curriculum vitae, list of publications, description of current and future research directions, and the names, addresses and telephone numbers of three references to: **Dr. Edward L. Orr, Department of Anatomy and Cell Biology, TCOM, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2699.** Applications must be received by February 1, 1993. *TCOM is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSORS

Biology Department Williams College

The Biology Department seeks applicants for two positions beginning July 1993: (1) a tenure-eligible position for an **ECOLOGIST** with ability to teach courses in community/ecosystem ecology, conservation biology and evolution, (2) an anticipated tenure-eligible position for a **NEUROSCIENTIST or ENDOCRINOLOGIST** with ability to teach courses in physiology and in the area of specialty. Normally faculty members teach one course and two laboratory sections, or an equivalent load, each semester. A research program which can attract extramural funding and involve undergraduates is expected.

Ph.D. required, some postdoctoral experience desirable. Please send curriculum vitae, statements of teaching and research interests, and three letters of reference by November 30, 1992, to: **William DeWitt, Department of Biology, Williams College, Williamstown, MA 01267.**

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

BIOLOGICAL SCIENCES: Western Michigan University seeks applications for a tenure-track **ASSISTANT PROFESSOR** position in biological sciences for Fall 1993, pending budgetary approval. Position requires a Ph.D. degree in biology, or evidence of imminent award, with expertise in the use of tissue culture or molecular methods to solve plant physiological problems associated with cellular, whole organism, environmental or evolutionary issues. Candidate must demonstrate potential for teaching, scholarship and publication. Postdoctoral work in plant physiology is desirable. Western Michigan University, a Carnegie Classification Doctoral I Institution, has embarked upon a vigorous affirmative action program and encourages applications from women and members of minority groups. Send letter of application, curriculum vitae, academic transcripts and three letters of recommendation to: **Leonard Beuving, Search Committee Chair, Biological Sciences Department, Western Michigan University, Kalamazoo, MI 49008.** Review of applications will begin December 1, 1992 and continue until position is filled.

CELL BIOLOGIST—The Department of Biology at the University of North Carolina at Greensboro (UNCG) has a 9-month tenure-track position with competitive start-up funds and salary for an **ASSISTANT PROFESSOR** beginning 1 August 1993. We seek an individual who will (1) develop a research program using modern methods of cellular and/or molecular biology, (2) interact with faculty and students conducting research in related biochemistry, neuroscience, and/or nutrition programs, and (3) teach undergraduate and graduate courses in cell biology and a course in mammalian anatomy. Postdoctoral experience is essential. Applicants should submit a statement of research and teaching interests, curriculum vitae, reprints, and three letters of reference by 15 December 1992 to: **Dr. Robert E. Gatten, Jr., Head, Department of Biology, UNCG, Greensboro, NC 27412.** *Equal Opportunity/Affirmative Action Employer; W/M/V/D. Minorities and women are especially encouraged to apply.*

Southeastern Louisiana University (SLU) Department of Biological Sciences

ENVIRONMENTAL MICROBIOLOGY. Tenure-track position at the **ASSISTANT PROFESSOR** level to join active program in Environmental Microbiology, starting August 1993. Applicants must hold a doctorate from accredited university in Environmental Microbiology or related field; demonstrated excellence in teaching and ability to receive extramural funding; interest in Science Education. Duties include teaching introductory Microbiology and upper level undergraduate and graduate courses of specialty; coordinate introductory Microbiology laboratories; direct graduate students; develop an active research program. Send curriculum vitae, statement of research and teaching interests and names of three references by December 5, 1992, to: **Dr. Gary Childers, Head, Department of Biological Sciences, P.O. Box 814-S.L.U., Hammond, LA 70402.** *SLU is an Affirmative Action/Equal Employment Opportunity Employer.*

POSITIONS OPEN

MICROBIAL PHYSIOLOGIST

Applications are invited for a tenure-track position available fall 1993 at the rank of **ASSISTANT PROFESSOR.** Applicants must be willing and able to teach general microbiology, microbial physiology and systematic microbiology. The successful candidate will also be expected to contribute to the molecular biology activities of the department. Doctorate required, along with evidence of teaching excellence and demonstration of a successful research program which will involve undergraduates and graduates.

Submit letter of interest, curriculum vitae, transcripts, description of research interests, recent reprints and three letters of reference by December 15, 1992 to: **Position F9203, 204 King Hall, Eastern Michigan University (EMU), Ypsilanti, MI 48197.** *EMU is an Affirmative Action/Equal Opportunity Employer. We encourage women and members of minority groups to apply and to identify themselves.*

MARINE BENTHIC ECOLOGY

The Department of Marine, Earth and Atmospheric Sciences (MEAS) at North Carolina State University (NCU) has a nine-month, state-funded, tenure-track position in the area of Marine Benthic Ecology at the **ASSISTANT or ASSOCIATE PROFESSOR** level available in fall 1993. Applicants must have a Ph.D. in marine science or related field; postdoctoral experience is preferred. Rank and salary will be commensurate with qualifications and experience. The successful assistant level candidate will be expected to obtain external research funding; the successful associate level candidate must have active research sponsorship. Either level will be expected to teach graduate/undergraduate courses in his/her specialty. Opportunities exist to interact with faculty in MEAS, other NCU departments, and with a large marine science community within the state. Areas of departmental expertise include stable and radioactive isotope geochemistry, biogeochemical cycling, sediment transport, behavioral/population/physiological ecology, and physical/biological processes in the water column. Candidates with backgrounds complementing these research interests are especially encouraged. Faculty have access to several coastal facilities and to the R/V Cape Hatteras operated by the Duke-UNC consortium.

Applications should be received before 15 January 1993. Please send a letter of interest with complete curriculum vitae and the names of three references to: **Dr. Dan Kamykowski, Chairman, Search Committee for Marine Benthic Ecology Position, Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Box 8208, Raleigh, NC 27695.** *North Carolina State University is an Affirmative Action/Equal Opportunity Employer.*

The Department of Chemistry at the University of Virginia is seeking an outstanding individual for a position in **ORGANIC CHEMISTRY.** This appointment is expected to be made at the **ASSISTANT PROFESSOR** level (tenure-track), though exceptional senior applications will be considered. All areas of organic chemistry will be considered, including organometallic chemistry. Candidates with a commitment to excellence in research and teaching are encouraged to send curriculum vitae containing a list of publications, a concise outline of research plans, and arrange to have three letters of recommendation sent to:

**Timothy L. Macdonald
Department of Chemistry
University of Virginia
McCormick Road
Charlottesville, VA 22901**

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FACULTY POSITION IN MOLECULAR BIOLOGY

Rutgers University
and the
Center for Advanced
Biotechnology and Medicine

The Center for Advanced Biotechnology and Medicine (CABM) and the Department of Molecular Biology and Biochemistry at Rutgers University are seeking applicants for a tenure-track faculty position. Applicants should have a strong record of publication in the processes of DNA replication, transcriptional control mechanisms, RNA splicing, receptors, or signal transduction. The successful candidate will occupy new laboratory space in the CABM Building and join a growing and highly productive life-sciences community on the Busch Campus where there are opportunities for research collaboration and participation in several university graduate programs. The position is highly competitive with regard to start-up funds, laboratory space, salary, and benefits. Send curriculum vitae, publications and summaries of research activities and plans, along with names and addresses of three references to: **Drs. Aaron J. Shatkin and Robert M. Krug, CABM/MBB Search Committee, 679 Hoes Lane, Piscataway, NJ 08854-5638. Rutgers University is an Equal Opportunity/Affirmative Action Employer, m/f/h/v.**



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RUTGERS

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Here at Chiron, we are on the leading edge of biotechnology research and scientific advancement, producing an array of therapeutic and diagnostic tools to advance potential cures for Aids, Cancer, Herpes, Hepatitis and Diabetes.

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Research Scientist II/Senior Research Associate (POS. #64143-29)

This individual will be responsible for helping to identify and develop new enzyme mediators as potential therapeutic agents, especially in areas of neurodegenerative illnesses and inflammation. Position will be filled at Research Scientist II or Senior Research Associate level. The level of responsibility to be assigned will depend on the individual applicant's educational background and experience level.

For **Research Scientist II**, candidates must have a Ph.D. in biochemistry, neurological sciences or pharmacology OR a Master's degree in one of the above disciplines plus two years of experience in enzymology/pharmacology.

For **Senior Research Associates**, candidates must have a Ph.D. in biochemistry, neurological sciences or pharmacology plus one year of Post Doc or one year of experience in biochemistry, pharmacology, neurochemistry, enzymology or closely related area OR a Master's degree in one of the above disciplines plus four years of experience in enzymology/pharmacology.

Candidates selected for interviewing will take an on-site writing assessment. Other factors to be considered for either position include experience and knowledge of tissue culture techniques.

Senior Associate Pharmacologist—Pharmacology (POS. #63128-29)

The Division of Pharmacology is seeking a pharmacologist to develop non-primate models of normal and impaired learning/memory and work with CNS program teams to discover drugs that restore cognitive function.

Candidates must have a Ph.D. in psychology, pharmacology or neuroscience with emphasis on the behavioral pharmacology or learning/memory plus one year of experience in learning/memory research. Candidates selected for interview will take an on-site writing assessment. Other factors to be considered in selection include publications demonstrating expertise in models of normal or impaired human learning/memory, and experience with the following: methods of producing impairment of learning/memory; operant behavior; neuroanatomical and histological procedures; surgery and drug development.

Burroughs Wellcome Co. offers a stimulating and challenging work environment, with one of the best compensation and benefits packages in the industry, including comprehensive health and dental plans, life and disability coverage, tuition reimbursement, relocation benefits, pension and investment savings plan, fitness facilities, and others. You will also enjoy an outstanding variety of cultural, educational and recreational advantages that come with living and working in the Research Triangle Park area, one of the most desirable and fastest-growing regions of the country. Please send your resume, indicating position number in your cover letter, by **November 23, 1992**, to: **Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**



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POSITIONS OPEN

McGILL UNIVERSITY DEPARTMENT OF PHYSIOLOGY (Aerospace Medical Research Unit) FACULTY POSITION SYSTEMS NEUROPHYSIOLOGIST

Applications are invited for a tenure-track position at the ASSISTANT PROFESSOR level. Research areas and techniques of special interest include the vestibulo-ocular reflex and its suppression, oculomotor control during coordinated eye-head-body movement and single unit recording in alert, behaving animals. Applicants should have a doctoral degree, relevant post-doctoral research experience and a demonstrated record of research accomplishments. The successful applicant will be expected to develop an independent research program emphasizing basic vestibular and/or oculomotor neurophysiology.

Send curriculum vitae, bibliography, concise statement of research interests and future plans and the names of three referees by February 1, 1993 to: **Dr. David Goltzman, Chairman, Department of Physiology, McGill University, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6.**

While all eligible candidates are encouraged to apply, initial preference will be given to applicants who are Canadian citizens or permanent residents of Canada in accordance with Canadian Immigration regulations.

BIOLOGIST. Nine-month, tenure-track position, rank of ASSISTANT PROFESSOR, to begin 1 September 1993. Ph.D. in a biological science with ability to teach in one or more of the following or related areas: entomology, developmental biology, physiological ecology, and a commitment to undergraduate teaching. Teaching responsibility will be primarily in the area of human anatomy and physiology. Instruction in the introductory biology program will be required as needed. Teaching upper division courses in area of specialization may be available on a limited basis. Completed applications will be accepted until 15 December 1992. Submit letter of application, official transcript(s), three letters of recommendation, and current curriculum vitae to: **Dr. Wayne R. Faircloth, Department of Biology, Valdosta State College (VSC), Valdosta, GA 31698.** VSC is an Equal Opportunity/Affirmative Action Employer.

NEUROPATHOLOGIST: A position for an ASSISTANT PROFESSOR OF PATHOLOGY is available in the University of Pittsburgh and the Children's Hospital of Pittsburgh. Successful candidates will be given full support to develop an active basic research program in Neuropathology and Neurobiology. Interest or training in Pediatric Neuropathology desirable but not required. Applicants may respond with a letter outlining their academic interests, and curriculum vitae to: **George Michalopoulos, M.D., Ph.D., Professor and Chairman, Department of Pathology, University of Pittsburgh, School of Medicine, Pittsburgh, PA 15261.** The University of Pittsburgh Medical Health Care Division is an Equal Opportunity Employer.

ASSISTANT PROFESSOR UNIVERSITY OF GEORGIA DEPARTMENT OF MICROBIOLOGY

The Department of Microbiology, at the University of Georgia, invites applications for a tenure-track Assistant Professor faculty position in cellular/molecular aspects of microbial physiology, or microbial pathogenesis. Qualifications for this position include a doctoral degree and a minimum of two years of postdoctoral experience, a strong record of research productivity, and a commitment to excellence in classroom instruction. Women and minorities are especially encouraged to apply. Responsibilities will include the development of an independent, externally funded program of research and graduate training, as well as teaching in undergraduate and graduate level courses within the Department. Applicants should submit a statement of research and teaching interests and curriculum vitae. Applicants should arrange to have three letters of reference sent prior to the closing deadline. **All applications must be received by December 10, 1992.** The target date for filling this position is September 1, 1993. Salary will be commensurate with qualifications and experience. Submit applications to: **Search Committee, Department of Microbiology, The University of Georgia, Athens, GA 30602.** The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

POSITIONS OPEN

BIOPHYSICIST, ASSISTANT PROFESSOR. Full-time, tenure-track appointment (nine-month). Appointee will teach graduate and undergraduate students and develop an active, extramurally supported research program. Preference will be given to applicants using multidimensional NMR or X-ray crystallography in structural research. Qualifications: Ph.D. and at least two years of postdoctoral research experience in biophysics, biophysical chemistry, or related field. Send letter of interest, curriculum vitae, description of research plans; and names, addresses, and telephone numbers of three professional references; and arrange to have reference letters sent to:

**Professor W. Curtis Johnson, Jr.
Department of Biochemistry and Biophysics
Oregon State University
Agricultural & Life Sciences 2011
Corvallis, OR 97331-7305**

Applications received by December 1, 1992 will receive full consideration; however, this closing date may be extended.

OSU IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER, AND IS RESPONSIVE TO DUAL-CAREER COUPLES.

ASSISTANT PROFESSOR, ECOLOGY

The Biology Department of Gettysburg College invites applications for a tenure-track position beginning with the 1993-94 academic year. Teaching responsibilities will include an upper division course in Ecology, additional courses in her/his area of interest, and participation in the first-year introductory biology course. The successful applicant will 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 and is located near the Washington/Baltimore area. *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**

The review of completed applications will begin December 18, 1992, and continue until the position is filled.

The Department of Psychiatry at the University of Wisconsin is seeking two faculty members at the ASSISTANT PROFESSOR level in the area of functional neuroanatomy of emotional and cognitive processes related to psychopathology and in the area of developmental psychobiology. Candidates for the functional neuroanatomy position should be familiar with one or more neuro-imaging modalities. The University of Wisconsin-Madison has a growing positron-emission tomography center with strong ties to the Department of Psychiatry. Candidates for the developmental psychobiology position should have appropriate training and experience to conduct psychobiological developmental research with primates. Priority will be given to candidates who have research interests relevant to fundamental processes of psychopathology. Candidates should submit a letter of application indicating which position they are applying for, curriculum vitae and also arrange to have at least three letters of recommendation sent by December 15, 1992 to: **Richard Davidson, Ph.D., Department of Psychiatry, Room D6/262, 600 Highland Avenue, Madison, WI 53792-2475.** Names of final applicants cannot be kept confidential. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

EMORY UNIVERSITY, ANALYTICAL CHEMISTRY FACULTY POSITION. The Department of Chemistry at Emory University invites applications and nominations for a tenure-track position in Analytical Chemistry at the ASSISTANT PROFESSOR level. An appointment at a higher level will be considered for an established investigator. A Ph.D. in chemistry is required. Applicants should send curriculum vitae and an outline of research plans, and arrange for three letters of recommendation to be sent to: **Professor Joseph B. Justice, Analytical Search Committee Chair, Department of Chemistry, Emory University, Atlanta, GA 30322.** Completed applications will be considered beginning November 15, 1992. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Department of Biology at College of William and Mary invites applications for two tenure-track positions at the ASSISTANT PROFESSOR level. One position is for a VERTEBRATE NEUROBIOLOGIST. The second position is for a CELL PHYSIOLOGIST with a biochemical emphasis. Successful applicants must be committed to excellence in teaching and research and must establish a vigorous research program involving undergraduate and beginning graduate students. Preference will be given to applicants with postdoctoral training. Teaching responsibilities for both positions include one upper division course and/or a graduate-level course and likely participation in one introductory course. The College of William and Mary has an enrollment of 5500 undergraduates and 1800 graduate students in five schools, including Arts and Sciences. The Department has a faculty of 23 and interacts with an additional 70 faculty members in the School of Marine Science. Screening of applications will begin on November 16, 1992, and the search will remain open until the positions are filled. Interested applicants should submit curriculum vitae, the names, addresses, telephone and FAX numbers of three references, and one page statements of teaching and research interests and capabilities to: **Professor E. L. Bradley, Search Committee Chair, Department of Biology, College of William and Mary, Williamsburg, VA 23187-8795.** *The College of William and Mary is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly urged to apply.*

PLANT ECOLOGY/POPULATION BIOLOGY THE UNIVERSITY OF TENNESSEE

The Department of Botany invites applications for a tenure-track ASSISTANT PROFESSORSHIP in physiological plant ecology or population biology to begin in the Fall of 1993. Applicants should have a Ph.D. with postdoctoral experience preferred. The successful applicant will be expected to establish a vigorous externally funded research program involving field and laboratory studies. Teaching at the graduate and undergraduate level is expected. Candidates will be evaluated on the basis of research accomplishments and teaching effectiveness. Application materials should include curriculum vitae, a statement of research goals, and a statement of teaching interests and philosophy. This material and three letters of reference should be sent to: **Dr. Beth C. Mullin, Ecology Search Committee, Department of Botany, The University of Tennessee, Knoxville, TN 37996-0011.** Screening of applicant files will begin on January 15, 1993. *UTK is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.*

Faculty Positions in Microbiology, Physiology and Evolutionary Biology/Ecology

The Department of Biology at the University of Houston will fill tenure-track positions in three areas at the ASSISTANT/ASSOCIATE PROFESSOR level. Applications are sought for (1) **Microbiology/Immunology:** strong experimental background in molecular biology or molecular genetics is most desired; (2) **Physiology:** animal physiologist who works at the organ or cellular level and interacts with existing faculty in cell/developmental biology, or ecology; (3) **Evolutionary Biology/Ecology:** broad interests ranging from molecular evolution to community ecology involving either plant or animal systems is most desired. Each of these positions has a teaching component as well as a requirement to establish an independent, externally funded research program. Recent postdoctoral experience is required. Send curriculum vitae, statement of research interests, and names of three references to: **Search Committee, Department of Biology, University of Houston, Houston, TX 77204-5513** by December 1, 1992. *The University of Houston is an Affirmative Action/Equal Opportunity Employer.*

ASSOCIATE/ASSISTANT PROFESSOR tenure-track position available August 26, 1993 in Exercise Physiology. Candidate should have postdoctoral research experience in cell/tissue/organ/systems function. Deadline December 31, 1992. Applications to: **Professor Arthur Vailas, University of Wisconsin, 2000 Observatory Drive, Madison, WI 53706, Telephone: (608) 262-9904; FAX: (608) 262-1656.** NOTE: Names, titles, occupations and addresses of applicants and nominees cannot be kept confidential. *Equal Opportunity/Affirmative Action Employer.*

Director - National Institute For Global Environmental Change

University of California

Applications and nominations are invited for the position of Director of the National Institute for Global Environmental Change (NIGEC). NIGEC's mission is to foster multidisciplinary research on global environmental and climate change focusing particularly on the Department of Energy's (DOE) research within the Federally-funded U.S. Global Change Research Program. The NIGEC office reports to the University of California, Office of the President and is responsible for administration and coordination of the global change research supported by NIGEC at five regional centers located at Harvard University (Northeastern), Indiana University (Midwestern), University of Alabama-Tuscaloosa (Southeastern), Tulane University (Southcentral), and the University of California Davis/Irvine (Western).

The Director will provide leadership and international visibility for the Institute, direct administration of the Institute affairs and staff, provide liaison to the DOE and to Congress, and promote planning, coordination, and integration of NIGEC-supported research within and among the regional centers. The University of California will provide the appropriate research environment to encourage the Director to foster a multidisciplinary research program. The Director is assisted by a Scientific Advisory Committee and National Technical Advisory Committee.

The successful candidate shall be or become a full faculty member of the University of California at the time he or she assumes the appointment. The position will be available on January 1, 1993. Nominations and applications should be submitted by December 1, 1992, to: Associate Vice President, Academic Affairs, Screening Committee E-92, UCOP, 300 Lakeside Drive, 9th Floor, Oakland, CA 94612-3550. EOE/AA

*** MOLECULAR MIMICRY ***

Terrapin Technologies, a private venture capital backed company, is a world leader in the systematic survey of molecular homology from the perspective of generic protein binding sites. We're using the new tools of combinatorial polymer libraries and have two fundamental patents issued with two more coming shortly. Benefits extend to a broad range of pharmaceutical and industrial chemistry applications.

Glutathione S-Transferase is our first drug target. This enzyme family provides a broad spectrum defensive system against toxic electrophiles, including many cancer drugs. We now have isozyme-specific inhibitors with promising cell culture activity as tumor-directed potentiators of chemotherapy.

We seek medicinal chemists, enzymologists, and cell biologists with the discipline and confidence to embark on a major adventure. *Equal Opportunity Employer / Competitive compensation. Send resumé with cover letter to:*

Human Resources
Terrapin Technologies
750-H Gateway Blvd.
So. San Francisco, CA 94080



POSTDOCTORAL SCIENTIST OPPORTUNITIES

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, currently has the following postdoctoral scientist opportunities available:

Molecular Immunology

As part of an ongoing collaborative research team, the selected individual will study molecules involved in T cell-APC interactions, T cell activation and induction of energy and apoptosis. The research will involve a multi-disciplinary approach using both cellular and molecular techniques and *in vitro* and *in vivo* models of immune function.

Qualified candidates will have a Ph.D. in Immunology, Molecular Immunology or a related discipline. It is essential to have a working knowledge of immunology, experience in molecular biology techniques and good communication skills. Publications in peer-reviewed journals is an advantage. Refer to Job #H0454.

Molecular Genetics

The successful candidate will be responsible for the study of the regulation and function of cytokines and their receptors using molecular biology techniques.

Qualified candidates will have a Ph.D. in Molecular Biology, Biochemistry, Chemistry or a related discipline and experience in standard recombinant DNA techniques. Experience in construction and screening of cDNA and genomic libraries, expression of genes in bacteria and eukaryotic cells, tissue culture, RNA isolation, protein purification, site specific mutagenesis and/or binding studies is desired. Refer to Job #H0025.

Cardiovascular Pharmacology

The successful candidate will work with a team of scientists who are using histochemical and molecular biology techniques to explore mechanisms of disease processes and assess the effectiveness of new drug therapy. The scientist will perform mRNA analysis by northern blot and PCR and *in situ* hybridization of RNA/DNA of peptide mediators in tissues of normal and disease states, as well as utilize immunocytochemical techniques to identify peptides in tissues of normal and disease states.

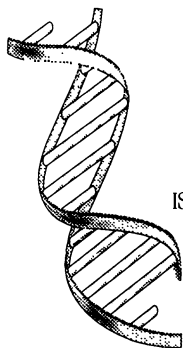
Qualified candidates will have a Ph.D. in Biochemistry, Molecular Biology or a related discipline. Experience in RNA/DNA isolation and hybridization techniques or related histological disciplines and a biochemical background is desired. Ability to present data in internal and external scientific meetings and a proven publication record are required. Refer to Job #H0107.

We offer a competitive compensation/ benefits package, as well as a stimulating work environment in which to grow and excel. For confidential consideration, please send your C.V., indicating the appropriate job number, to: Senior Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



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ASSISTANT/ASSOCIATE DIRECTOR, MEDICINAL CHEMISTRY

ISIS Pharmaceuticals, a rapidly growing San Diego-based biopharmaceutical company, is seeking an organic chemist with strong management skills to lead one or more cross-functional project teams composed of those disciplines essential for the discovery and development of oligonucleotide drugs. Disciplines include therapeutic program directors; molecular biologists, biophysical, biological, and analytical scientists; and business development and intellectual property professionals.

The successful candidate will have proven experience in recruiting, organizing and managing of project teams of synthetic, organic, medicinal and analytical scientists. At ISIS, you will manage one or more medicinal chemistry project teams composed of 4-6 Scientists/Senior Scientists in the area of peptide nucleic acids (PNA), uptake of oligonucleotides, cleaving oligonucleotides or other areas of mutual interest.

Our requirements include a PhD or equivalent in synthetic organic chemistry, or an appropriate related area, with at least 7 years experience post PhD degree. You will also have had significant work experience in a major pharmaceutical company, and have a background as an organic chemist with broad-based technical skills preferably including nucleoside and/or oligonucleotide chemistry; and expertise in nucleic acids and peptide synthesis, purification and analysis; natural product synthesis; medicinal chemistry of antisense oligonucleotides; and molecular modeling.

ISIS Pharmaceuticals offers a competitive salary, excellent benefits and equity participation. If you are a strong team player, a proven manager with excellent written and oral communication and presentation skills, please submit cover letter and CV to: Dr. P. Dan Cook, Director of Medicinal Chemistry, ISIS Pharmaceuticals, 2292 Faraday Avenue, Carlsbad, CA 92008. Equal Opportunity Employer.



ISIS PHARMACEUTICALS



**THE HONG KONG
UNIVERSITY OF
SCIENCE AND
TECHNOLOGY**
Department of
Biochemistry
FACULTY POSITIONS

The Hong Kong University of Science and Technology, established in April 1988, is a publicly-funded research university with a mandate to teach, to do research, to nurture talents and to facilitate technological development in Hong Kong. The medium of instruction is English. The Department of Biochemistry invites applications for **Lecturer** positions in all areas of biochemistry and biophysical chemistry, as well as the allied areas of microbiology, cell biology and pharmacology. Applicants should have a Ph.D. in Biochemistry or related discipline with at least one year of postdoctoral experience. Generous fringe benefits include medical and dental benefits, annual leave, and children's education allowances. Air passages and housing are also provided where applicable. Salary will be in the range of US\$44,100 to US\$73,600 (exchange rate: US\$1 = HK\$7.8) per annum depending on qualification. Initial appointments will normally be on a three-year contract which is renewable subject to mutual agreement. A gratuity of an amount equal to 25% of the total basic salary drawn will be payable upon successful completion of contract. Approved sabbatical leave will be at full salary. Applications/nominations should be sent with a C.V., together with the names and addresses of three referees, to **Professor J. Tze-Fei Wong, Head of Department of Biochemistry, HKUST, Clear Water Bay, Kowloon, Hong Kong (Fax: 852 3583978)** by 31 December 1992, but the search will continue until suitable appointments have been made.

Research Scientist - Population Modelling

\$A41,929 - \$A56,531 + Superannuation

Division of Fisheries, Hobart, Tasmania, Australia

We are seeking an experienced and innovative scientist to research the population dynamics of commercially important temperate shark stocks in Australian waters.

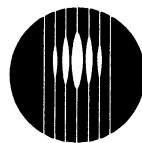
Studies are currently directed towards an investigation of the spatial structure of the fishery including quantification of movement and mixing rates from tagging experiments, the evaluation and development of a catch/effort database, refining models of catchability, and evaluation and risk analysis of management strategies. The appointee will play a major role in a multi-organisational research program on southern shark and in scientific and management discussions relevant to the fishery.

You will need a PhD or equivalent experience in quantitative zoology, fisheries biology, or similar, together with a strong background in the development of mathematical and computer models for biological systems.

You should have a superior record of innovative research achievements and the capacity to communicate research findings to a wide variety of audiences.

Dr John Stevens telephone (international) 61-02-206353 can provide further information and our selection criteria. The position is indefinite (tenured) and assistance with relocation costs is provided.

Please send applications addressing the selection criteria and including details of your qualifications and experience and the names of two referees, quoting Ref. No. FC92/25 SCI to: **The Human Resources Manager, CSIRO Division of Fisheries, GPO Box 1538, Hobart, Tasmania 7001, Australia** by November 20, 1992.



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AUSTRALIA**

FACULTY POSITION IN BIOLOGICAL SCIENCES AT COLUMBIA UNIVERSITY

The Department of Biological Sciences at Columbia University invites applications from outstanding candidates with experience in cell and molecular biology for a full-time junior faculty position. Preference will be given to those with interests in the area of developmental biology, but candidates with other interests will also be given serious consideration. Candidates should forward their curricula vitae, a summary of research interests, and arrange for letters from three references to be sent to:

Professor Carol Prives, Chairperson
C & M Biology Search Committee
Department of Biological Sciences
600 Fairchild
Columbia University
New York, NY 10027

The deadline for applications is December 15, 1992.

Columbia University is an Equal Opportunity/Affirmative Action Employer.



Pharmaceutical
Division

Research Scientists In Metabolic Disorders

The Miles Research Center (MRC) in West Haven is the US pharmaceutical research arm of Miles Inc., Pittsburgh. Located on a campus-like setting near the Long Island Sound, the MRC is being developed into a world-class research complex, which includes the new Institute of Metabolic Disorders.

CELL BIOLOGIST/PHYSIOLOGIST

A scientist is needed for the study of the basic mechanisms of glucose uptake and metabolism in a research program directed towards the identification of new therapeutics for the treatment of diabetes. Candidates must have two or more years' postdoctoral research experience in cell biology, biochemistry or cellular physiology. Experience in the area of glucose transport and in intracellular trafficking is desirable.

DIABETIC COMPLICATIONS S C I E N T I S T

A scientist is needed for the study of the basic mechanisms of non-enzymatic glycation in a research program directed towards the identification of new therapeutics for the treatment of diabetic complications. Candidate must have at least two years' postdoctoral research experience in biochemistry and physiology. Experience in the area of non-enzymatic glycation chemistry and in the clinical development of secondary complications of diabetes is preferred.

O B E S I T Y R E S E A R C H E R

A scientist is needed to conduct biochemical-based research on the peripheral and central abnormalities associated with obesity. The successful applicant will have two or more years' postdoctoral experience in cell biology, biochemistry or neurochemistry. A background in obesity or neurobiology would be helpful.

I N V I V O P H A R M A C O L O G I S T

We are seeking a Pharmacologist/Physiologist to establish animal models of diabetes and obesity. The applicants should have a PhD and a strong background in the regulation of carbohydrate metabolism. Experience in small animal surgery and biochemistry is preferred.

The candidates should demonstrate evidence of innovation and productivity by a strong publication record, and be able to work efficiently in a multidisciplinary team.

Miles Research Center offers highly attractive compensation commensurate with qualifications and a benefits package, including 401(k) and relocation assistance. These positions and the research environment in our new West Haven facility allow for a professional working environment conducive to career development. For immediate and confidential consideration, please send your resume, including salary history, to: **Dept. AAJA, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.** An Equal Opportunity Employer M/F/H/V.

FACULTY POSITIONS

Plant Molecular Biologist

The Department of Molecular Genetics and Cell Biology invites applications for new faculty positions in the field of molecular biology of plants at the assistant professor level, although exceptional candidates at any level will be considered. We are especially interested in candidates using developmental genetic approaches to understand pattern formation, but the quality of the research program and its relationship to existing strengths in the Department will be the most important considerations. Complete applications with three letters of recommendation should be sent by December 1, 1992 to:

Dr. Anthony P. Mahowald
Chairman, Department of Molecular Genetics
and Cell Biology

THE UNIVERSITY OF CHICAGO

920 E. 58th St.
Chicago, IL 60637

An Affirmative Action Equal Opportunity Employer
(Women and members of minority groups are strongly encouraged to apply)



FELLOWSHIP PROGRAMS UNITED STATES-ISRAEL

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

The first program (Postdoctoral Fellowship), established in 1985, is between postdoctorate fellows from the United States and scientists from Israel and vice versa. Grant applicants should be citizens of either the U.S. or Israel, and should have fulfilled the requirements for a Ph.D. degree within the last three years (postdoctorates).

The duration of each Postdoctoral Fellowship is one year. Under certain conditions, a one year extension will be considered.

The Postdoctoral Fellowship grant will be paid directly to the grantee. Each grantee will be awarded a grant of \$25,000, to cover travel expenses and living during the first year. If necessary, a small allowance, not to exceed \$3,000, will be paid to the host institution to cover operating expenses for the proposed research.

The second program, (Research Fellowship) has been incorporated into the Program since 1990. U.S. citizens who are established research scientists in American non-profit research institutions, universities or federal and state agencies are eligible to become Research Fellows. Research Fellows will be funded for a period of 4 to 12 months with a grant of \$25,000 (on a 12 month basis) to cover travel and modest living expenses.

Applications should reach BARD's Offices by January 1, 1993.

For information on application procedures please contact BARD offices at either:

BARD
USDA-ARS
Room 107, Bldg. 005,
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POSITIONS OPEN

ENVIRONMENTAL BIOLOGY

Harvey Mudd College (HMC) seeks candidates for a tenure-track position, preferably at the rank of entry-level **ASSISTANT PROFESSOR**, to join a new program in biology. Applicants must have expertise in some area of environmental biology relevant to current environmental issues, such as environmental change, conservation biology or ecosystems energetics. Strong quantitative approaches are particularly desirable. Breadth of knowledge for excellent undergraduate teaching in a small department is required, as is a research program appropriate for participation by advanced undergraduates. HMC is a small private college of science and engineering (member of the Claremont Colleges) with a select undergraduate student body. Send curriculum vitae, research statement, and three letters of reference to: **Dr. Catherine McFadden, Department of Biology, Harvey Mudd College, Claremont, CA 91711**. To assure consideration, all materials should be received by December 15, 1992. *An Equal Opportunity/Affirmative Action Institution. Women and minorities are encouraged to apply.*

COMMUNITY ECOLOGIST

The Faculty of Biological Science, University of Tulsa, invites applications for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level beginning Fall Term 1993. The University of Tulsa is a comprehensive, independent university that emphasizes excellence in teaching and research. The Faculty of Biological Science consists of 16 members with diverse research interests; degrees are offered at the B.S., M.S., and Ph.D. levels. We seek an individual with research interests in plant or animal species. Salary and start-up funds will be commensurate with experience. Applicants should submit curriculum vitae, a statement of teaching and research interests, recent reprints and three letters of reference to: **Dr. James R. Stewart, Ecologist Search Committee, Faculty of Biological Science, University of Tulsa, 600 South College Avenue, Tulsa, OK 74104**. Review of applications will begin in January 1, 1993 and continue until the position is filled. *The University of Tulsa, an Equal Opportunity/Affirmative Action Employer, is committed to diversifying its faculty and staff. Members of underrepresented groups (including people of color, people with disabilities, women and veterans) are strongly encouraged to apply.*

ASSOCIATE OR ASSISTANT PROFESSOR. BIOCHEMISTRY. The Department of Chemistry and Biochemistry at the University of Oklahoma has a tenure-track opening in biochemistry or structural biology at the Associate or Assistant Professor level. Minimum qualifications include a Ph.D. in biochemistry, chemistry, molecular biology, or closely related field, one year of postdoctoral experience, and excellent credentials in, as well as a strong commitment to, both research and teaching. Candidates at the Associate Professor level must have an active, funded research program, while candidates at the Assistant Professor level must show promise of developing a strong, vigorous research program which includes active supervision of graduate students in research. Minority and women candidates are strongly encouraged to apply. Review of candidates will begin November 16, 1992, and will continue until an appointment is made. Applicants should submit complete curriculum vitae that includes research and teaching experience, a description of ongoing and future research plans, and a statement of teaching interests. Applicants should also have at least three letters of reference sent to: **Dr. Arthur E. Johnson, Chair, Search Committee, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019**. *The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.*

The Department of Pathology, University of Pittsburgh, is inviting applications for a non-tenure-track position at the **ASSISTANT PROFESSOR** level, effective July 1, 1993. Graduate degree and three years of postdoctoral training in **psychoneuroimmunology** is essential. Candidates must have experience in studying immune function in animal models of stress and/or behavioral conditioning. The successful candidate will set up an independent research program, and assume teaching responsibilities. Send curriculum vitae and three references to: **Bruce S. Rabin, M.D., Ph.D., Department of Pathology, University of Pittsburgh, Pittsburgh, PA 15213-2582**, by January 1, 1993.

POSITIONS OPEN

INVERTEBRATE BIOMECHANICS

The Department of Environmental, Population, and Organismic (EPO) Biology invites applications for a tenure-track faculty position in invertebrate biomechanics. Preference will be given to candidates at the **ASSISTANT PROFESSOR** level, but all levels will be considered. Research interests may include any aspect of biomechanics or functional morphology. Development of strong research and teaching programs in invertebrate biology with an evolutionary, ecological, or physiological component consistent with the broad themes of this department will be required. To apply, send curriculum vitae, statements of research and teaching interests, and the names and addresses of four references to: **Dr. Steven C. Hand, Search Committee Chair, Department of EPO Biology, University of Colorado, Boulder, CO 80309-0334**. Applications should be postmarked no later than 1 December 1992. *The University of Colorado is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR, TERRESTRIAL PLANT ECOLOGY. The Department of Biological Sciences, University of Arkansas, Fayetteville, is expanding its program in ecology and evolutionary biology by seeking candidates for a tenure-track position in plant ecology. Candidates should demonstrate ability to conduct a vigorous research program and show excellent potential for undergraduate and graduate teaching. We encourage scientists working in all areas of plant ecology to apply. Salary, start-up, and facilities are competitive. Send curriculum vitae, statements of research and teaching interests, and three letters of reference to: **Chair, Search Committee, Department of Biological Sciences, 601 Science-Engineering Building, University of Arkansas, Fayetteville, AR 72701**. Review of applications will begin 1 December, 1992, and the search will remain open until the position is filled. *The University of Arkansas is an Equal Opportunity/Affirmative Action Institution. The University of Arkansas is seeking to increase substantially the number of faculty members who are African Americans, members of other minorities, and women. The University therefore strongly encourages applications from African Americans, members of other racial and ethnic minorities, and women who possess the stated qualifications for this position.*

ASSISTANT PROFESSOR, MOLECULAR BIOPHYSICS WESLEYAN UNIVERSITY

The Department of Molecular Biology and Biochemistry invites applications for a tenure-track position in molecular biophysics at the Assistant Professor level. We are searching for candidates with expertise in x-ray crystallography, spectroscopy (excluding magnetic resonance) or biological thermodynamics. Research areas of particular interest include the structure and interactions of regulatory proteins and the molecular basis of gene expression. Candidates are expected to initiate vigorous research programs and to participate in the departmental Ph.D. program, supported, in part, by an NIH training grant in Molecular Biophysics. Excellence in research and in teaching at both the graduate and undergraduate levels is expected. Please send curriculum vitae, description of research plans and three letters of recommendation to: **Molecular Biophysics Search Committee, c/o Dr. Irina M. Russu, Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, CT 06459-0175**.

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

TENURE-TRACK ASSISTANT PROFESSOR OF BIOCHEMISTRY UNIVERSITY OF WASHINGTON.

Demonstrated ability to develop a strong and creative research program in any area of modern biochemistry, including but not limited to biological regulatory processes and macromolecular function. Ph.D. degree or its equivalent and appropriate postdoctoral research experience will be considered. Send curriculum vitae, copies of representative papers, a succinct statement of research interests, and three letters of recommendation by November 30, 1992 to: **Search Committee, Department of Biochemistry, SJ-70, University of Washington, Seattle, WA 98195**. FAX: 206-685-1792. *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

EUKARYOTIC CELL BIOLOGIST. The Department of Biology at New Mexico State University (NMSU) anticipates appointing a tenure-track **ASSISTANT PROFESSOR** for Fall 1993. Applicants should have postdoctoral experience and should apply modern molecular methods to research problems in plant or animal cell biology. The successful candidate will develop a vigorous research program and will teach at the undergraduate and graduate levels. He or she may participate in the Molecular Biology M.S./Ph.D. Program and the NIH-sponsored Minority Access to Research Careers and Minority Biomedical Research support programs. *Women and minority candidates are strongly encouraged to apply.* The department offers bachelors degrees in biology and microbiology and the M.S. and Ph.D. in biology. Submit curriculum vitae, statement of research and teaching interests, and the names, addresses, and telephone numbers of at least three references to: **Dr. Ceil A. Herman, Search Committee, Department of Biology, Box 30001, NMSU, Las Cruces, NM 88003**. Closing date is November 23, 1992. *NMSU is an Affirmative Action/Equal Employment Opportunity Employer.*

FACULTY POSITIONS

University of California, Berkeley (UCB) Department of Nutritional Sciences

Two 9-month tenure-track faculty positions available **July 1, 1993: ASSOCIATE or FULL PROFESSOR in Nutritional Biochemistry and ASSISTANT PROFESSOR in Human Nutrition**. Responsible for establishing a research program in nutrition focusing on cellular or molecular aspects of nutrient functions, metabolic regulation, or human nutrition and physiology. Teaching assignments will be compatible with the candidate's background.

Ph.D., or equivalent, in Nutrition or a related biological science required. Send curriculum vitae with publications list, statement of research and teaching interests, and name and address of three referees to: **Dr. Barry Shane, Department of Nutritional Sciences, UCB, Berkeley, CA 94720** by January 1, 1993. Applications submitted after the deadline will not be considered.

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

MICROBIAL ECOLOGIST

The Faculty of Biological Science at the University of Tulsa invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Successful applicants will have a Ph.D., preferably with postdoctoral experience, will be expected to teach in the undergraduate and graduate curricula, and will demonstrate the potential for establishing an independent, funded research program that is capable of attracting M.S. and Ph.D. students. Salary and start-up funds are competitive. Please submit curriculum vitae, statements of research and teaching interests, and three letters of recommendation to: **Lamont Anderson, Microbial Ecology Search, Faculty of Biological Science, University of Tulsa, 600 South College Avenue, Tulsa, OK 74104-3189**. Review of applications will begin on January 1, 1993 and continue until the position is filled.

The University of Tulsa, an Equal Opportunity/Affirmative Action Employer is committed to diversifying its faculty and staff. Members of underrepresented groups (including people of color, people with disabilities, women and veterans) are strongly encouraged to apply.

ASSISTANT PROFESSOR OF BIOCHEMISTRY. A tenure-track position will be available beginning in August 1993. This position will be offered to an individual who has demonstrated ability to carry on an independent research program in **membrane protein biochemistry** with an emphasis on **signal transduction**. Required qualifications include a Ph.D. in Biochemistry or a closely related field, at least two years of postdoctoral training and an established record of research productivity. A commitment to developing an independent, nationally competitive and externally funded research program as well as to excellence in undergraduate and graduate teaching is essential. Please submit curriculum vitae, a synopsis of future research plans (two to three pages), and have three letters of recommendation sent to: **Faculty Search Committee, Department of Biochemistry, WLS M407, The University of Tennessee, Knoxville, TN 37996-0840**. Application review will commence on December 1, 1992. *UTK is an Equal Employment Opportunity/Title IX/Section 504/ADA Employer and encourages applications from women and minorities.*

National Heart, Lung, and Blood Institute
National Institutes of Health

SCIENCE ADMINISTRATOR/BIOLOGIST CHEMIST/MEDICAL OFFICER

The Thrombosis and Hemostasis Branch in the Division of Blood Diseases and Resource, is recruiting two Health Science Administrators, Medical Officers, Chemists or Biologists. The incumbents of these positions will be responsible for management of research grants and generation of reports and science initiatives on thrombosis, blood coagulation, platelets, endothelial cells, thrombolysis, etc. A Ph.D. in biological sciences/chemistry or M.D. (equivalent experience may be substituted for education) is essential. Excellent interpersonal communication skills in interacting with colleagues and the scientific community is highly desirable; knowledge of the thrombosis/hemostasis area, the NIH grant process as a PI or member of a review group, programs and national policies in health research, and data processing is preferred. Appointments may be made at GS-12 to GS-14 grades (\$38,861 - \$80,087). Candidates may be eligible for a physician's comparability allowance. Also, these positions are open to qualified members of the Commissioned Corps, USPHS. For additional info, call Dr. Pan Ganguly, Chief, Thrombosis and Hemostasis Branch, (301)402-2237. Candidates should submit a SF-171 and responses to selection criteria to Dr. Ganguly, Federal Building, Room 5C14, 7550 Wisconsin Avenue, Bethesda, Maryland 20892. Review of applications will begin immediately but positions will remain open until filled.

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



**Florida State
UNIVERSITY**

High Resolution Electron Microscopy of Macromolecules Faculty Position Florida State University Program in Structural Biology and Institute of Molecular Biophysics

The Program in Structural Biology at Florida State University invites applications for a full-time tenure track faculty position in High Resolution Electron Microscopy of Macromolecules. Rank and salary are open and will be commensurate with experience. Academic appointment will be within the Department of Biological Science or Department of Chemistry. The candidate should have demonstrated expertise in the study of macromolecular structure and a well developed plan for independent research.

Florida State University has made a strong commitment to Structural Biology. Funding is provided by grants from the Lucille P. Markey Foundation and the State of Florida, and the University is renovating the 50,000 sq. ft. Institute of Molecular Biophysics to develop new laboratories designed and equipped for the study of the structure and activity of macromolecular systems. Over the next four years, the program will expand through the addition of seven new faculty members with research interests in Structural Biology. Extensive new instrumentation will be developed to provide these faculty with state of the art facilities. In coordination with the National High Magnetic Field Laboratory, the Supercomputer Computational Research Institute and the Center for Materials Research and Technology, unique facilities are available for NMR, computational biology and materials synthesis and research.

A curriculum vitae, brief research plan, and a list of at least three references should be sent to:

**Lee Makowski
Director**

**Structural Biology Program and
Institute of Molecular Biophysics
Florida State University
Tallahassee, Florida 32306-3015**

Florida State University is an Equal Opportunity/Affirmative Action employer.



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Using innovation to improve the efficiency of molecular biology research products has been the cornerstone of Stratagene's development since our founding in 1984. With more than 200 employees and 500 products, Stratagene is now seeking candidates for the following positions.

POSTDOCTORAL SCIENTISTS

Candidates should possess a PhD with experience in molecular biology and genetic toxicology. Responsibilities include assisting in new technology development in the toxicology and genetic toxicology field, including involvement in study design and testing of transgenic system, e.g. Big Blue™ mouse and rat. An individual with experience in *in vivo/in vitro* mutation assays and general molecular biological techniques including PCR and DNA sequencing is desired. Publication in referred journals and attendance at national scientific meetings will be strongly encouraged.

Another position requires a PhD with molecular biology experience for the development of epitope screening systems and DNA cloning and expression vectors. Experience with lambda and filamentous phage systems, PCR, DNA cloning and protein engineering are desired. Individual with extensive knowledge of prokaryotic systems preferred. Publication in referred journals and attendance at national scientific meetings will be strongly encouraged.

We also seek a Postdoctoral Scientist with experience in cloning and expression of thermostable enzymes and extensive knowledge and practical experience in nucleic acid enzymology and general molecular biology techniques. Preference will be given to motivated candidates with a high level of proficiency in recombinant DNA technology with training in nucleic acid modifying enzyme biochemistry.

The above successful Postdoctoral Scientists are considered for full Staff Scientists positions.

MARKETING PRODUCT MANAGER

Responsible for facilitating the process of moving products from the laboratory to the marketplace and for continued promotion of existing products. Duties include competitive market analysis, technical writing, training and interfacing with company and customers, and interfacing with distributors. A BS/MS or equivalent and strong practical background in molecular biology are required. Experience in cell biology is also helpful. Background in sales/marketing preferred.

Stratocyte, a Stratagene subsidiary, is looking for exceptional candidates to fill several positions.

POSTDOCTORAL SCIENTISTS AND RESEARCH ASSOCIATES

Research will be performed in the use of cutting-edge molecular biology techniques in immunology leading to human therapeutic applications. [See *Proc. Natl. Acad. Sci. (USA)* 87, 8055-8099 (1990) and *J. Immunol.* 148, 2918-2922 (1992).] Research experience required in molecular biology, especially bacteriophage vectors, PCR strategies, and cDNA library cloning. Preference will be given to innovative individuals who also have some expertise in protein design and/or immunology. Publication in referred journals and attendance at national scientific meetings will be strongly encouraged.

Stratagene and Stratocyte offer attractive and stimulating work environments in beautiful San Diego, as well as competitive salaries, incentive and benefits programs. All qualified candidates are invited to send resume and a letter specifying the position of interest to: **Stratagene, Attn: Professional Staffing, 11099 N. Torrey Pines Rd., La Jolla, CA 92037. AA/EOE.**



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POST-DOCTORAL POSITIONS

TOGETHER, the people of Boehringer Ingelheim Pharmaceuticals, Inc. have achieved a respected position for the Company in the United States health care environment. We have made a beginning. Now we dedicate ourselves to pushing back the boundaries of science in the search for pharmaceutical products to treat cardiovascular, pulmonary, viral and immune-mediated and other selected diseases.

We are currently seeking candidates for the following Post-Doctoral positions in our Drug Discovery Group:

PROTEIN CRYSTALLOGRAPHY — The successful candidate will participate on research projects including crystal structure studies of inhibitor complexes of HIV reverse transcriptase, HIV protease as well as several other proteins. The crystallographic facility includes a RAXIS imaging plate detector on a Rigaku RU200, Convex C220, ESV and several other workstations. Requires a Ph.D. with experience in protein purification and crystallization, data collection, protein/structure determination and refinement.

COMPUTATIONAL DRUG DESIGN — The successful candidate will participate in several projects supporting medicinal chemistry teams as well as interact with x-ray crystallography and NMR spectroscopy groups. Requires a Ph.D. in Computational Medicinal Chemistry with experience using computational chemistry methodologies including molecular mechanics, molecular dynamics and quantum mechanics calculations. Expertise in small molecules modeling, 2D/3D-QSAR and/or small molecules by biopolymer interactions is highly desirable. Strong experience using the major software packages, SYBYL and QUANTA/CHARMM is preferred.

Our expanding facilities are located on a campus like setting in a beautiful area of western Connecticut. We have state-of-the-art resources, a strong commitment to research and a dynamic, people oriented organization. Boehringer offers a competitive salary and benefits package and relocation assistance to qualified candidates.



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For consideration, please forward your C.V., indicating position of interest, to: Dept. MH-PD-MC-1S, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877-0368. We are an equal opportunity employer m/f/d/v. As a progressive health care company, we have a nonsmoking environment.

EMORY UNIVERSITY FACULTY POSITIONS IN POPULATION BIOLOGY

As part of a major expansion, the Department of Biology will make several tenure-track appointments in the areas of population biology, ecology and evolution. Presently, available positions are at the assistant professor level, although an appointment at a higher rank may be considered in exceptional circumstances. Preference will be given to candidates engaged in theoretical and/or experimental studies of the population biology of microbes and the population biology and evolution of host-parasite interactions and infectious disease. A Ph.D. degree and postdoctoral experience are required. Applicants should provide evidence that they will develop strong independent research programs. Applications from minority and female candidates are strongly encouraged.

Emory University is in a suburban section of Atlanta. Biology is housed in a new, well-appointed and well-equipped building shared with the basic science departments of the School of Medicine. Emory has a strong faculty in microbiology, molecular biology, immunology and epidemiology as well as several physical anthropologists and historians working on aspects of infectious diseases. The physical proximity of the Centers for Disease Control (CDC) and Emory's Yerkes Primate Center and the close relationship with the Carter Center provide a wealth of opportunities for research collaborations. The successful candidates will participate in the development of an interdepartmental graduate program in population biology, ecology and evolution.

Please send a vitae, reprints of publications, a description of current research and of future research plans, and the names and addresses of four referees to: Dr. Bruce Levin, Chair, Population Biology Search Committee, Department of Biology, Emory University, Atlanta, GA 30322, Tel (404) 727-2826, Fax (404) 727-2880, E-MAIL BIOBRL@EMUVM1.CC.EMORY.EDU. Review of applications will begin on November 15, 1992. Emory University is an Affirmative Action/Equal Opportunity Employer.

PROJECT MANAGER MOLECULAR BIOLOGY

SmithKline Beecham Animal Health is *simply better*...in products, in people and performance. Our commitment to excellence has enabled us to become one of the leading veterinary healthcare organizations worldwide. Presently, we have a unique opportunity for a seasoned Project Manager.

In this key, highly challenging role, you will manage the cloning and expression of existing antigens and new recombinant vaccine antigens. You will optimize the expression of cloned antigens in a variety of prokaryotic and eukaryotic expression systems through scale-up development. The successful professional will have a Ph.D. in Molecular Biology or Biochemistry, at least 4 years post doctoral experience in molecular biology, and excellent communication skills. Demonstrated expertise in eukaryotic gene expression with experience in yeast, baculovirus or mammalian cell expression systems, and the ability to lead a multi-disciplinary project team are also required.

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Lincoln, NE 68521

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POSITIONS OPEN

EVOLUTIONARY ANTHROPOLOGIST/BIOLOGIST

EMORY UNIVERSITY, Departments of Anthropology and Biology, announce a joint, tenure-track, **ASSISTANT PROFESSOR** position for an evolutionary anthropologist/biologist. Preference will be given to anthropologists or biologists with active research programs on the genetics, molecular evolution, or behavioral ecology of human populations. Candidates must be able to interact effectively with faculty in both Anthropology and Biology programs, have a strong research record, and be committed to quality teaching at the undergraduate as well as the graduate level in both Anthropology and Biology departments.

Application deadline is December 31, 1992. Send curriculum vitae, description of current and planned research and teaching interests, and the names of four referees to:

Dr. Carol M. Worthman or Dr. Mark Ridley
Search Committee Chairs
Department of Anthropology
Emory University
Atlanta, GA 30322

Emory University is an Equal Opportunity/Affirmative Action Employer.

VIROLOGIST ASSOCIATE PROFESSOR

Applications are invited for a tenure-track associate professor position in the Department of Veterinary Pathobiology to work with an established group of investigators studying feline immunodeficiency virus.

The candidate should have a Ph.D. or an equivalent degree, and experience and publications in virology and viral immunology. Preference will be given to those candidates who are working with lentiviruses. It is also expected that any applicant will have a proven record in acquiring extramural funding and be an active participant in the training of graduate students. Duties will include participation in teaching within the department. Interested persons should send curriculum vitae, a statement of research interests, and three letters of recommendation before January 1, 1993 to:

Ellen W. Collisson, Ph.D.
Search Committee Chairperson
Department of Veterinary Pathobiology
College of Veterinary Medicine
Texas A&M University
College Station, TX 77843-4467

Texas A&M University is an Equal Opportunity Employer.

FACULTY POSITIONS IN MOLECULAR PHARMACOLOGY UNIVERSITY OF SOUTHERN CALIFORNIA School of Pharmacy

Two tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** positions exist in the Department of Molecular Pharmacology and Toxicology. Candidates must have Ph.D. degree in Pharmacology or related discipline, postdoctoral experience, and strong commitment to excellence in research and teaching in the professional and graduate programs. Preference will be given to candidates with demonstrated research accomplishment in growth factor/neurotransmitter/neuropeptide receptor pharmacology using biochemical and/or molecular approaches. Candidates will be expected to maintain an independent, externally funded research program. Send curriculum vitae, set of selected reprints, brief statement of research interests, and names of three references to:

Dr. Timothy Chan, Chairman
Department of Molecular Pharmacology
and Toxicology
USC School of Pharmacy
1985 Zonal Avenue
Los Angeles, CA 90033

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POSITIONS OPEN

FACULTY POSITION MICROBIOLOGY University of Pittsburgh

The Department of Infectious Diseases and Microbiology of the Graduate School of Public Health, University of Pittsburgh is seeking outstanding applicants for an **ASSOCIATE/ASSISTANT PROFESSOR** in the area of the molecular pathogenesis of HIV. Our department is committed to the continuing development of a strong multidisciplinary program wherein molecular biology, immunology, and the epidemiology of viral pathogenesis are integrated with ongoing clinical studies. Candidates should have a Ph.D., M.D., or equivalent, and have sufficient experience to establish an independent research program which integrates basic virology and/or immunology with clinical medicine and public health. This is a full-time tenure-track position. The salary and proposed start date are negotiable. Send curriculum vitae and names of three references to: **Charles R. Rinaldo, Jr., Ph.D., Chairperson, IDM Search Committee, A417 Crabtree Hall, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, PA 15261, Telephone: (412) 624-3112.** To ensure full consideration of all applicants, applications will be reviewed until the position is filled. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR WOUND AND BONE HEALING

The Division of Plastic Surgery at UMDNJ-Robert Wood Johnson Medical School, New Brunswick, New Jersey, is seeking a tenure-track scientist to direct its research efforts in wound and bone healing. An excellent opportunity exists to develop in these areas and in related aspects of biomaterials research. We are seeking qualified individuals having proven research activity, possessing the ability to undertake clinically relevant research. Requires a Ph.D. degree and experience in a related area. The successful candidate must be capable of securing outside funding after initial support. Please send a letter, curriculum vitae and copies of relevant publications to: **Gregory Borah, M.D., Chief, Division of Plastic Surgery, UMDNJ-Robert Wood Johnson Medical School, One Robert Wood Johnson Place, CN19, New Brunswick, NJ 08903-0019.** *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.*

ASSISTANT PROFESSOR OF PHYSIOLOGY. Applications invited for physiology faculty position effective July 1993. Must have a doctoral degree; broad teaching experience highly desirable. Submit curriculum vitae and names of three references by February 15, 1992 to: **H. Jay Lyons, Ph.D., Chairman, Department of Physiology, Southeastern University of the Health Sciences, 1750 N.E. 168th Street, North Miami Beach, FL 33162.**

CHEMISTRY FACULTY POSITIONS, ASSISTANT/ASSOCIATE PROFESSOR ranks, tenure-track, beginning fall 1993: 1) Toxicologist (Position F9307) with strong chemistry or biochemistry background; 2) Polymer Chemist (Position F9306) with preference to applicants who also can teach organic and/or instrumental analysis. Minimum Master's degree plus 18 hours in appropriate area of specialization for Assistant Professor rank; **Ph.D. strongly preferred.** Ph.D. required for Associate Professor rank. Evidence of excellence in both teaching and research necessary. Responsibilities include teaching chemistry courses at introductory level as well as undergraduate and graduate courses (M.S. level) in area of specialization and developing a research program. Send letter of application with names of three references, résumé, undergraduate and graduate transcripts (copies acceptable), statement of teaching philosophy and interests, and statement of research interests and equipment requirements. Have three letters of recommendation and all above requested materials sent to: **Position # (see above), 204 King Hall, Eastern Michigan University, Ypsilanti, MI 48197.** Deadline for receipt of applications is December 1. *Women and members of minority groups are strongly encouraged to apply and to identify themselves. Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

HARVARD UNIVERSITY BIOSAFETY OFFICER AND PROGRAM MANAGER

Harvard University seeks candidates for the position of Biosafety Officer and Program Manager. This position has complete responsibility for the management, development and implementation of biosafety programs for Harvard University. The successful candidate must possess strong management skills in dealing effectively with complex biosafety issues.

Position requirements: Advanced Degree in Microbiology or related discipline required (Ph.D. preferred); five to 10 years of biosafety management experience in an academic or research setting preferred. Please send résumé to: **Anne Marie Centrella, Harvard University, 46 Oxford Street, Cambridge, MA 02138.**

Harvard University is an Affirmative Action/Equal Opportunity Employer.

BIOLOGY CHAIRPERSON—West Georgia College (WGC) invites nominations and applications for the Chair of the Biology Department. A candidate must have considerable interpersonal skills, Ph.D. in a Biological Science and commitment to quality undergraduate teaching and research in a state-supported liberal arts program. The position which begins July 1, 1993 is a 12-month appointment; rank may be at the Associate or Full Professor level; salary is commensurate with qualifications. The department is composed of 10 faculty and 150 majors. Its strengths are in cell and molecular biology. Please send curriculum vitae, publications, 3 letters of recommendation, and a statement of teaching and administrative philosophy to: **Chair Search, Biology Department, West Georgia College, Carrollton, GA 30118.** Closing date is January 15, 1993 or until filled. *WGC is an Equal Employment Opportunity/Affirmative Action Employer.*

PROJECT MANAGER. The Center for Aquatic Ecology of the Illinois Natural History Survey has a full-time, USEPA-funded position to refine a bioenergetics model to predict growth of zebra mussels and their potential effects on food webs in North American rivers. Metabolic rates will be measured in the laboratory and predictions tested against mussel growth measured in the field. To ensure full consideration, applications should be received by 30 November 1992. For further information contact: **Ms. Jacqueline Sanders, Personnel Officer, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820, Telephone: (217) 244-7790.** *An Equal Opportunity/American Disabilities Act Employer.*

PHARMACOLOGIST: ASSOCIATE MANAGER. Clinical Affairs; Responsible for planning and managing clinical programs for broad drug-specific or disease-specific disciplines. Coordinate interdepartmental activities involved in clinical research including protocol design and approval, operational support, bio-statistical design, medical guidance and government regulatory submissions. Interface with Marketing and Professional services divisions. Represent Clinical Affairs division on Product Development team. Train and supervise Clinical Research Associates in management/conduct of studies and projects. Negotiate grants and track budgets. Participate in interim and final report preparation for FDA submissions. Five years in job offered or five years in pharmacological research or academic environment which includes at least two years in job offered. Ph.D. in Pharmacology. Salary \$5834 per month. Job site/interview: Thousand Oaks, California. Send this ad with résumé to: **Job # EJ 34029, P.O. Box 9560, Sacramento, CA 95823-0560,** not later than November 2, 1992.

HEAD, BIOBEHAVIORAL HEALTH to provide leadership for a multidisciplinary faculty and program focused on interactions among biological, psychological, behavioral and environmental variables as they relate to the development of states of health and illness and to biobehavioral intervention strategies. The Head, functioning as a Department chair, provides administrative leadership for research/teaching, program and faculty development, staff and budget management, maintains a personal program of research and strong links with Penn State's College of Medicine. Send letter of interest and curriculum vitae or nominations to: **D. Ford, Acting Head, Biobehavioral Health, College of Health & Human Development, University Park, PA 16802.** *An Affirmative Action/Equal Opportunity Employer.*

Oncogene Science has developed a sophisticated high throughput drug screening laboratory which utilizes industry leading robotic systems in drug discovery programs aimed at developing novel classes of therapeutics for the treatment of cancer, atherosclerosis, osteoporosis, asthma and diabetes.

Program Manager, Drug Discovery

The Company seeks an experienced research and development manager to lead a group of approximately 10-12 people in the design, implementation and execution of high throughput drug screens. The ideal candidate will have at least 4 years' experience at managing screening programs in the pharmaceutical industry, a strong background in assay automation and excellent organizational and presentation skills.

Oncogene Science is strategically located on Long Island with ready access to major academic institutions in the New York City metropolitan area. The Company offers a competitive salary and outstanding benefits package. Qualified applicants may forward their resumes, including a list of publications and references, to: **Oncogene Science, Inc., 106 Charles Lindbergh Blvd., Uniondale, NY 11553, Attn: CG.** An Equal Opportunity Employer.



Position: ASSISTANT PROFESSOR OF BIOCHEMISTRY

Research interests and competence: This position will be filled by an individual with training and research interests in Molecular Mechanisms of Development utilizing any one of several well-defined developmental systems. The particular focus of the research should be on the functions of proteins in such systems. Expertise in protein chemistry, enzymology as well as the methodologies of molecular genetics is essential.

Qualifications: Candidates must have a Ph.D. or M.D. degree and at least two years of postdoctoral experience in this area of research. There must be strong recommendations relative to research ability and teaching competence. In addition, there must be demonstrated productivity and evaluations of the candidate which give clear indications of an ability to initiate and develop an effective, independent research program. The candidate should also be articulate and able to perform effectively as a lecturer and in more informal teaching situations at the medical and graduate student as well as postdoctoral level.

Applications: Interested individuals should send the following information to Philipp Strittmatter, Department of Biochemistry, University of Connecticut Health Center, Farmington, CT 06032.

1. A complete curriculum vitae and bibliography.
2. Three or more letters of recommendation bearing upon the points above.
3. A brief description of future research interests, objectives and experimental plan.
4. If available, reprints of most significant work.

An Affirmative Action/Equal Opportunity Employer
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SCIENTIST

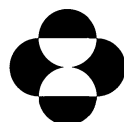
Drug Metabolism and Pharmacokinetics

The Animal and Exploratory Drug Metabolism Department at Merck Research Laboratories has an opening for a highly motivated B.S./M.S. chemist/biochemist who is interested in pursuing a career in drug metabolism and pharmacokinetics.

The position requires an M.S. in Chemistry/Biochemistry (or a related field) with 1-2 years of research experience, or a B.S. in Chemistry/Biochemistry with at least 3 years of research experience or equivalent. The successful candidates will be responsible for *in vivo* and *in vitro* metabolism studies of new drugs. The candidate should have working knowledge in drug metabolism and pharmacokinetics with demonstrated strength in modern analytical techniques such as HPLC and spectroscopy. Experience in the following areas is highly desirable:

- Development of bioanalytical methods to quantitate drugs in biological fluids
- Isolation, purification and characterization of metabolites
- Handling of radiolabeled chemicals
- GLP studies

Merck Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent. For consideration, send your resume with the names of three references to **Randall J. Bradford, Merck & Co., P.O. Box 2000, Ad #128, Rahway, New Jersey 07065, R80-A3.** EOE/AA/VH EMPLOYER.



MERCK

Merck & Co., Inc.

NRC-CNRC

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

Research Officer (Saskatoon, Saskatchewan)

The Plant Biotechnology Institute of the National Research Council of Canada in Saskatoon has a continuing staff position for a Research Officer. The scientist will work in the legume biotechnology group on the development and use of transgenic plants. Major duties will be the planning, managing and reporting of independent research within the context of an integrated group project, but participation in overall project planning and promoting interaction between the project and external partners is expected. Duties also include supervision and evaluation of laboratory personnel.

Applicants must have a Ph.D. in plant biotechnology or related discipline, with emphasis on plant molecular genetics. A good understanding of molecular biology, biochemistry and genetics in relation to crop improvement and a strong record of publication are expected. Experience in production of transgenic plants and in molecular identification of plant genes or regulation of gene expression in plants is required. The position requires high levels of scientific creativity and judgment, the ability to function both individually and as a team member or leader and good skills in verbal and written communication in English.

SALARY RANGE: Commensurate with qualifications.

Ceux qui désirent recevoir une copie de cette annonce en français peuvent communiquer avec l'agent de dotation à l'adresse ci-dessous.

Apply in writing, before November 30, 1992, giving complete details of education and experience to: The Recruitment Section, National Research Council of Canada, Ottawa, Ontario, K1A 0R6. In reply, please quote PB-91-16.SCI



National Research Council Canada
Conseil national de recherches Canada

Canada

POSITIONS OPEN

BIOLOGY DEPARTMENT HEAD

Southwest Missouri State University (SMSU) invites applications and nominations for the position of Head of the Department of Biology, effective August 1993. SMSU has an enrollment of 21,000 and the Department has 530 majors and 26 masters students. Current faculty maintain research interests primarily in organismal biology. Applicants must have a Ph.D., a distinguished record of teaching, scholarship and professional achievement, administrative experience, demonstrated ability to provide leadership in teaching and research, and be a strong advocate of undergraduate and graduate education. **Applicants must submit, by December 1, 1992, a letter of application, a statement of administrative philosophy, curriculum vitae, and the names, addresses and telephone numbers of five references to: Dr. Steve Jensen, College of Science and Mathematics, Southwest Missouri State University, Springfield, MO 65804-0094. SMSU is an Affirmative Action/Equal Opportunity Employer.**

NASA SPACE LIFE SCIENCES TRAINING PROGRAM

GRADUATE STUDENT LEVEL LABORATORY TEACHING POSITIONS

Applications are being accepted for four temporary staff positions, January through August, 1993, at Kennedy Space Center supporting design, development, and implementation of educational laboratory research projects. Projects will be major part of NASA, intensive-study, summer, educational curriculum for 40 undergraduates. Positions will provide unique on-the-job experience in space life science operations and research while under supervision of resident and visiting scientists and engineers. Graduate student level persons with strong teaching and research experience in general biology, physiology, plant science, ecology, embryology, microbiology, bioengineering, or combinations of above are especially encouraged to apply. For more information contact: **Dr. Ronald L. Biro at (407) 867-2926.** Applicants should send letter of interest, curriculum vitae, and three letters of reference, to be received no later than November 25, 1992, to: **The Bionetics Corporation, Human Resources-PCA, Mail Code BIO-1, Kennedy Space Center, FL 32899. Equal Opportunity Employer. M/F/H/V.**

TWO FACULTY POSITIONS available in the Department of Biochemistry on or about July 1, 1993. Minimum qualifications include a Ph.D. or M.D. degree, three to four years of postdoctoral experience and evidence of significant research accomplishments in regulatory biochemistry. Evidence of ability to attract extramural funding is expected. Preference will be given to applicants who can interact with existing faculty at UT, Memphis working in the areas of signal transduction (one position) or connective tissue biochemistry (one position). Applicants should send curriculum vitae and three letters of reference to: **Dr. John N. Fain, Department of Biochemistry, University of Tennessee, Memphis, TN 38163. The University of Tennessee is an Equal Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Women and minorities are encouraged to apply.**

NEUROBIOLOGY STAFF POSITION—The Department of Neuroscience, Roche Institute of Molecular Biology, invites applications for an opening at the Assistant/Associate member level. The Department currently has well developed interests in inter- and intracellular signaling mechanisms and gene expression/regulation in adult and developing nervous systems. We are most interested in recruiting a candidate with an established research record in electrophysiology and a strong interest in collaborating in molecular biology projects. Outstanding applicants in other areas of Neuroscience will also be considered. The Institute provides investigator salary and generous support for supplies, equipment and personnel. Institute staff members enjoy complete academic freedom and independence in the choice and pursuit of research problems. Applicants should submit résumé, names of three references, and an outline of future research direction by December 15, 1992 to: **John A. Connor, Department of Neuroscience, Roche Institute of Molecular Biology, 340 Kingsland Street, Nutley, NJ 07110. We are an Equal Opportunity Employer.**

POSITIONS OPEN

The Department of Biological Chemistry is seeking applications at the **PROFESSOR** level for a 12-month, tenure-track faculty position. Outstanding individuals with research experience or interests that augment current departmental programs in the area of gene regulation are sought. Applications are encouraged from individuals with innovative approaches to expressing eukaryotic proteins in systems where gene therapy strategies are applicable. The successful candidate will be expected to have an active research program, and will participate in the teaching activities of the Department. Applicants should send curriculum vitae and bibliography, a brief description of current and future research directions, and request that three letters of reference be sent to: **Dr. Jack E. Dixon, Chair, Department of Biological Chemistry, University of Michigan Medical School, 5416 Medical Science I, Ann Arbor, MI 48109-0606.** Application deadline is November 30, 1992.

The University of Michigan is an Affirmative Action/Equal Opportunity Employer. Applications from qualified women, minorities and/or disabled individuals are encouraged.

WAYNE STATE UNIVERSITY—PROFESSOR AND CHAIR OF THE DEPARTMENT OF PSYCHOLOGY. The 40-member department is in a newly formed College of Science and offers Ph.D. programs in Bio-psychology, Clinical (APA-accredited), Cognitive, Developmental, Industrial/Organizational, and Social Psychology. Wayne State University, located in Detroit's Cultural Center, is an urban research university serving 34,000 students. The Department has strong ties to the WSU School of Medicine, the Merrill-Palmer Institute for Family and Human Development, the Institute of Gerontology, and major industries and health care organizations. We seek an academic leader to enhance the research and teaching programs of the Department. Candidates should have a distinguished record of scholarly activity, a nationally recognized program, broad appreciation of basic and applied research, and a strong commitment to graduate and undergraduate education. A doctorate in psychology or a related field is required. Nominations or letters of application, curriculum vitae, and names of at least three references should be sent to: **Professor Carl R. Johnson, Psychology Search Committee, 275 Chemistry, Wayne State University, Detroit, MI 48202.** The search will remain active until the position is filled; credentials will be reviewed as they are received. *Wayne State University is an Equal Opportunity/Affirmative Action Employer. WSU: People working together to provide quality service.*

SUMMER FACULTY POSITIONS IN THE SPACE LIFE SCIENCES TRAINING PROGRAM (SLSTP) A NASA PROJECT

Four Project Counselor positions are open in the SLSTP to be held at the Kennedy Space Center, Florida. Project Counselors will be involved in the implementation of the 7-week-long program (starting mid-June 1993) activities for undergraduate science and engineering students. An applicant must have a minimum of an M.S. degree (Ph.D. preferred) and experience in teaching and research with undergraduates in the sciences. For further information and an application packet (all application materials must be postmarked by December 31, 1992) contact:

**SLSTP Program Director
Florida A&M University
106 Honor House
Tallahassee, FL 32307
Telephone: (904) 599-3623/3636**

Harvard Medical School/Brigham and Women's Hospital Department of Anesthesia invites applications for a **TENURE-TRACK POSITION.**

This position calls for an independent investigator with a Doctoral degree who has a proven record of excellence, originality and productivity. The recruited investigator will establish an independent program focusing on the role of leukocytes in the cellular and molecular mechanisms of ischemia-reperfusion injury.

Qualified candidates should send curriculum vitae, a description of current research and the names and addresses of three references to: **Simon Gelman, M.D., Ph.D., Anesthesiologist-in-Chief, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

Harvard Medical School/Brigham and Women's Hospital are Equal Opportunity Employers.

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY Case Western Reserve University

The Department of Biochemistry at Case Western Reserve University (CWRU) invites applications and nominations for a tenure-track position. The strengths of the department are represented in the areas of protein chemistry, protein/nucleic acid interactions, virology, cell biology, regulation of gene expression, and metabolism. An individual who will add to any of these areas and provide active interactions with the members of the department is preferred. Applicants should have a vigorous and well established research program.

Applicants should send curriculum vitae, statement of research plans, and names of three references (with telephone numbers) to:

**Chair of Search Committee,
Department of Biochemistry,
Case Western Reserve
University School of Medicine,
Cleveland, OH 44106-4935.**

CWRU is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.

THE SCHOOL FOR FIELD STUDIES (in conjunction with Northeastern University)—**SUMMER FACULTY POSITIONS** open for the following programs/locations: Raptor Ecology/U.S. or Canada; Landscape Ecology/U.S. Rockies; Whales/Pacific coastal area of U.S. or Canada; Tropical River Ecology/Belize; Sea Turtle Ecology/Costa Rica; Ethnobotany/Ecuador; Primate Ecology/Central or South America.

QUALIFICATIONS: Ph.D. or equivalent experience required, M.S. minimum, field and research experience in the region, two years of teaching at the undergraduate level, leadership abilities, management experience, and the ability to live in a remote field setting with 16 undergraduates in an intensive teaching and research environment. Must be available mid-June through the end of August 1993.

TO APPLY: Send curriculum vitae, a detailed letter explaining skills and experience to: **SFS Summer Faculty Search 93, The School for Field Studies, 16 Broadway, Beverly, MA 01915. FAX: 508-927-5127. Deadline: November 16, 1992.**

MOLECULAR BIOLOGIST—RESEARCH SCIENTIST. Position available immediately to study B cell lymphokine and B cell lymphokine receptor expression. Specific requirements include a strong background in molecular biology including cDNA cloning and sequencing, vector construction, point mutations and PCR. Salary: \$35,000 to \$40,000.

POSTDOCTORAL POSITION IN MOLECULAR AND CELLULAR BIOLOGY. A postdoctoral position is immediately available to study B cell lymphokine secretion and B cell lymphokine receptor expression. Applicants should have experience in cell and molecular biology techniques. Send curriculum vitae, a brief description of research experience and the names and addresses of three references to: **David Benjamin, M.D., The Ohio State University, 1232 James Cancer Hospital, 300 West Tenth Avenue, Columbus, OH 43210-1228. The Ohio State University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately for electrophysiological studies on command cells and central pattern generator neurons which regulate locomotion in *Aplysia*. Competitive salary and benefits, and excellent neuroscience environment and living conditions. Experience in intracellular electrophysiology preferred. Send curriculum vitae and names of references to: **Dr. James Blankenship, Marine Biomedical Institute, University of Texas Medical Branch, 200 University Boulevard, Galveston, TX 77555-0843. UTMB is an Equal Opportunity/Affirmative Action Employer M/F/D/V. UTMB is a smoke-free/drug-free workplace. UTMB hires only individuals authorized to work in the United States.**

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ANIMAL PHYSIOLOGIST

Rhodes College

The Biology Department of Rhodes College invites applications for a tenure track position to be filled at the Assistant Professor level beginning in August 1993. Applicants whose research interests are in the area of Neuroscience are especially encouraged, however all qualified applicants will be considered. Teaching responsibilities will include Animal Physiology, a course in the area of interest, and involvement in the Introductory Biology series. Candidates must have the Ph.D. degree, a strong interest in teaching at the undergraduate level and a commitment to continuing research.

Applicants should submit transcripts, curriculum vitae, a statement of teaching philosophy and research interests and have 3 letters of recommendation sent by December 16, 1992 to:

Dr. John Olsen, Chairman
Department of Biology
Rhodes College
Memphis, TN 38112

Rhodes College is a highly selective College of Liberal Arts and Sciences with 1400 students and a student/faculty ratio of 12:1. Located in midtown Memphis, Rhodes College and the nine member Biology Department enjoy close ties with Memphis State University, U.T. Memphis Medical School, and St. Jude Children's Research Hospital.

Rhodes College is an Equal Opportunity Employer and encourages applications from qualified minority and women candidates.



CHAIRPERSON

Department of Biochemistry

Duke University Medical Center is seeking candidates for the position of Professor and Chairperson of the Department of Biochemistry. Responsibilities include providing leadership for research and teaching activities in the School of Medicine. Minimal qualifications include an earned doctorate in a related discipline, a distinguished record of scholarship, administrative experience in an academic environment, and a demonstrated ability to work collaboratively in a university and academic medical center and with external constituencies.

The position will be available in the Summer of 1993. Applicants should send a copy of their curriculum vitae with references and other credentials to: **Biochemistry Search Committee, Box 3701, Duke University Medical Center, Durham, NC 27710.** Consideration of applications will begin on February 1, 1993 and continue until the position is filled.

Duke University
Medical Center

Duke University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN EPIDEMIOLOGY

Department of Biomedical and Environmental Health Sciences

School of Public Health

University of California, Berkeley 94720

The Department of Biomedical and Environmental Health Sciences invite applications for a tenure-track position in epidemiology at the Assistant Professor level, beginning July 1, 1993, pending budgetary approval. The successful candidate is expected to develop and maintain an active research program and to participate in the teaching program, including the supervision of doctoral thesis research. The area of specialization within epidemiology of the successful candidate is less important than the candidate's potential to develop an independent research program.

Candidates should have a doctoral, medical, or equivalent degree and evidence of research experience in epidemiology.

Applicants should send their curriculum vitae and the names and addresses of three references to:

Professor Arthur Reingold
Chair, Search Committee for Epidemiologist
Department of Biomedical & Environmental Health Sciences
School of Public Health
University of California
140 Warren Hall
Berkeley, CA 94720

Deadline for application is **December 31, 1992.**

THE UNIVERSITY OF CALIFORNIA IS AN EQUAL OPPORTUNITY, AFFIRMATIVE ACTION EMPLOYER.

Seattle, WA

ZYMOGENETICS

SCIENTIST (Diabetes Research)

ZymoGenetics, a Seattle based company making important strides in the development of therapeutic products aimed at diabetes, tissue repair, and coagulation disorders has an exciting opportunity available for a Scientist experienced in Diabetes research.

We are seeking a Scientist to join in the investigation of physiologic glucose control and innovative molecular targets for the therapy of Diabetes Mellitus. The preferred candidate will have a PhD in the sciences or MD, and 2+ years related experience.

ZymoGenetics, a subsidiary of NOVO NORDISK, offers the excitement of a research and development environment characteristic of a small company with the scope and stability of a large pharmaceutical corporation through NOVO NORDISK, the world's largest manufacturer of insulin. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package.

Please apply by sending your CV to:

ZymoGenetics, Inc.,
Attn: Human Resources, #12N192
4225 Roosevelt Way NE
Seattle, WA 98105

ZymoGenetics is an Equal Opportunity Employer

Novo Nordisk



FACULTY POSITIONS

Developmental and Cell Biologists

The Department of Molecular Genetics and Cell Biology invites applications for new faculty positions in the field of developmental and cell biology at the assistant professor level, although exceptional candidates at any level will be considered. The quality of the research program and its relationship to existing strengths in the Department will be the most important considerations. Complete applications with three letters of recommendation should be sent by December 1, 1992 to:

Dr. Anthony P. Mahowald
Chairman, Department of Molecular Genetics
and Cell Biology

THE UNIVERSITY OF CHICAGO

920 E. 58th St.
Chicago, IL 60637

An Affirmative Action Equal Opportunity Employer
(Women and members of minority groups are strongly encouraged to apply)

Quality Biotech Inc. is a leading, international biotechnology service company engaged in contract research and biosafety testing for the biopharmaceutical industry. As part of our expansion, the following openings are available:

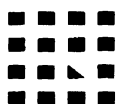
Virology

DIRECTOR—Requires a PhD, 5-10 years of relevant experience, a record of independent scientific leadership, an accomplished supervisory background and excellent communications skills.

RESEARCH ASSOCIATES—Requires MS/BS, 2+ years of academic/industrial experience and a strong background in virology/ cell biology.

The successful candidates will be involved in the development and implementation of novel assays for the detection of retroviral and other contaminants in cell substrates and products using state-of-the-art techniques such as PCR, DNA hybridization, marker rescue assays, etc.

Quality Biotech is located in the Greater Philadelphia region -an area rich in scientific, cultural and recreational diversity. We offer excellent opportunities for professional growth, a competitive salary, relocation assistance, medical and dental benefits, tuition reimbursement and 401(k) and flex benefit plans. Please send resume and salary history to: Quality Biotech Inc., Human Resources-A1, 1667 Davis Street, Camden, NJ 08104. An Equal Opportunity Employer



Quality Biotech

Innovative Science. International Scope.

Director

Cell Adhesion/Extracellular Matrix Biology Laboratory

The University of Alabama at Birmingham (UAB) has committed substantial financial and space resources to establish a major new Laboratory to study the role of cell adhesion molecules and the extracellular matrix as they relate to fundamental questions in biology. This will be a multi-disciplinary Laboratory which will interact with a significant number of established investigators in several UAB departments including the Department of Biochemistry and the Department of Medicine's divisions of Oncology and Clinical Immunology and Rheumatology. The Laboratory will occupy 9,000 square feet of newly renovated Laboratory and office space and accommodate up to five (5) full-time established investigators and their support staff. The duties of the Director will be to lead the recruitment of other established investigators to the Laboratory, coordinate research activities within the Laboratory and between it and other extracellular matrix research personnel within The University of Alabama at Birmingham. This is a tenured position and will include an appointment as a Senior Scientist in the UAB Arthritis and Musculoskeletal Diseases Center. Qualified candidates will hold a PhD and/or a MD degree, have a successful history of competing at the national level for peer-reviewed funding and publication of the results of their research, and have demonstrated scientific leadership capabilities.

UAB is a rapidly growing institution with many opportunities in medical research at the fundamental science level, as well as opportunities for interaction between basic scientists and clinical investigators. Birmingham has a comfortable climate and offers an affordable and cosmopolitan lifestyle. UAB is an Affirmative Action/Equal Opportunity Employer.

Send curriculum vitae with cover letter to:

John D. Mountz, MD, PhD
Chairman
Search Committee
LHR Building, Room 405
The University of Alabama at Birmingham
Birmingham, AL 35294-0007



At Enzytech, Inc., our focus is on the discovery, development and production of novel drug delivery systems. Our commitment to science starts by discovering talented employees to join our research team in an environment which fosters the exploration of new ideas. If you thrive on research and the exciting interchange of knowledge, it's time for you to become part of our outstanding team of scientists and researchers.

Research Scientist Pharmaceutical Sciences

We are currently seeking a talented professional to plan, organize and execute projects in the research and development of controlled release drug delivery systems. This includes bench level experimentation and collaboration with process development and clinical manufacturing.

Requirements include a PhD with 0-3 years' experience in chemistry, biophysics, chemical engineering or related discipline. A strong background in analytical methods for polymers and low molecular weight organic molecules is essential. Excellent problem solving and communications skills are a must.

We offer an excellent salary and benefits package including medical, dental, life insurance, 401(k), and tuition reimbursement. For confidential consideration, please send resume to: Human Resources Dept., Enzytech, Inc., 64 Sidney Street, Cambridge, MA 02139. An Equal Opportunity Employer.

FACULTY POSITION IN NEUROBIOLOGY COLUMBIA UNIVERSITY

The Department of Biological Sciences of Columbia University invites applications from outstanding candidates for a full time junior faculty position in neurobiology. The search will focus on individuals examining the nervous system at the cellular and molecular levels.

Candidates should forward their curricula vitae, a summary of research interests, and three letters of reference to:

Darcy B. Kelley
Chairperson
Neurobiology Search Committee
Department of Biological Sciences
600 Fairchild
Columbia University
New York, NY 10027

The deadline for applications is
December 15, 1992

Columbia University is an Equal Opportunity/Affirmative Action Employer

CONCORDIA UNIVERSITY Department of Chemistry and Biochemistry Tenure-Track Assistant Professor in Bioanalytical Chemistry

The Department of Chemistry and Biochemistry, Concordia University, invites applications from qualified individuals for a tenure-track appointment at the level of Assistant Professor in the area of Bioanalytical Chemistry to commence August 1, 1993. The successful candidate will have a Ph.D., as well as postdoctoral experience, in Bioanalytical Chemistry or in Biochemistry with strong interests in analytical research, and will be expected to establish an active research program in an area related to Bioanalytical Chemistry. The candidate will be involved in teaching Analytical and Bioanalytical Chemistry at both the graduate and undergraduate levels. The Department of Chemistry and Biochemistry is located on Concordia's urban campus in cosmopolitan downtown Montreal, an area which includes a number of international pharmaceutical and biotechnological organizations, as well as the Biotechnology Research Institute of the National Research Council of Canada. English is the principal language of instruction.

Applications should include a curriculum vitae, a summary of research interests, a detailed research proposal, and an indication of start-up requirements. Candidates should arrange to have three letters of recommendation sent directly to the Chair. Applications should be addressed to Prof. Raymond Zienius, Chair, Analytical Chemistry Search Committee, Department of Chemistry and Biochemistry, Concordia University, 1455 de Maisonneuve Blvd. West Montreal, Quebec, H3G 1M8. The evaluation of candidates will be ongoing until the position is filled. In accordance with Canadian Immigration practice, priority will be given to Canadian citizens and Landed Immigrants. Concordia University is committed to employment equity, and encourages applications from women, aboriginal peoples, visible minorities, and disabled persons.

All things being equal, women candidates shall be given priority.

SCIENTIST FLOW CYTOMETRY

Program Resources, Inc. (PRI) has a need for a scientist in the Flow Cytometry Section of the Clinical Services Program at the NCI's Frederick Cancer Research & Development Center.

The candidate we seek will be responsible for determining the flow cytometric monitoring to be performed in support of clinical trials, ensuring integrity of data obtained, and providing expertise regarding design of experiments; coordinating on investigations regarding the influence of efficiency of mononuclear cell recovery on functional assays; collaborating in the development of monitoring strategies and will also be involved in studies to investigate pre-treatment screening assays which may predict responsiveness to biological therapies.

PhD with 3 years experience, particularly in immunology and flow cytometry. Supervisory experience required.

PRI offers a salary commensurate with credentials and an attractive fringe benefits program. For consideration, forward CV to Barbara J. Norton-Gill, Technical Recruiter.

PROGRAM RESOURCES, INC.

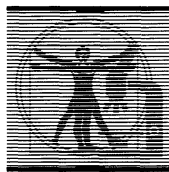
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Frederick, MD 21702

EOE, M/F



FACULTY POSITIONS UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES

The UCR/UCLA Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside (UCR), and the University of California, Los Angeles (UCLA), School of Medicine, has two tenure-track openings at the level of ASSISTANT PROFESSOR in the Division of Biomedical Sciences at UCR available July 1, 1993.

NEUROSCIENCES. Primary teaching responsibilities will be in cellular neurobiology, including electrophysiology, for first-year medical students.

PHYSIOLOGY. Primary teaching responsibilities will be in cardiovascular, respiratory and gastrointestinal physiology for first-year medical students.

Applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience, and must be able to develop a strong independent research program. The specific area of research is open, but preference will be given to cell biologists or physiologists who are using molecular and cellular techniques in their studies. Applicants should also have a strong commitment to teaching both medical and graduate students. Prior teaching experience in a medical school basic science curriculum is preferred. Applicants should send a curriculum vitae, bibliography, two or three representative reprints, a statement of present and future research goals, current grant support, and the names of three references. The deadline for applications and nominations is December 1, 1992.

Send applications to: David A. Johnson, Chair (Neurosciences) or Paul M. Quinton, Chair (Physiology), Division of Biomedical Sciences, University of California, Riverside, CA 92521-0121.

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

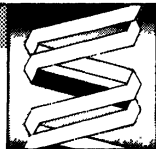
UNIVERSITY OF VERMONT Molecular/Cellular Physiologist

The Department of Physiology and Biophysics seeks two tenure/research-track faculty members at the level of Assistant or Associate Professor. The Department has strengths in the following aspects of muscle physiology: 1) Contraction and motility; 2) Ion channel and transport function; 3) Cellular growth and remodeling; 4) Intra- and intercellular signaling. We are seeking individuals whose research directly complements existing strengths. Strong preference will be given to individuals applying forefront cellular and/or molecular biological techniques to the study of physiological function. Candidates for Assistant Professor must have an earned doctorate, plus 2 or more years of postdoctoral experience at time of application. They must demonstrate the potential to develop an active independent research program and to contribute effectively to department teaching at both graduate and undergraduate levels. Applicants at the Associate Professor level must have demonstrated excellence in teaching and their ability to direct and sustain vigorous and productive research programs. The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and individuals from diverse racial, ethnic, and cultural backgrounds are encouraged to apply.

Applicants should send a Curriculum Vitae along with a description of career goals, research objectives, and names of three references, by November 15, 1992, to:

Chair, Faculty Search Committee
Department of Physiology & Biophysics
University of Vermont College of Medicine
Burlington, Vermont 05405-0068

Located on the coast of Maine next to scenic Acadia National Park, The Jackson Laboratory is a world renowned center for mammalian genetics.



Professional Research Assistant

Gene Targeting Service

The Gene Targeting Service laboratory, involved in the production of mutant mice by homologous recombination in embryonic stem cells, requires an individual experienced in blastocyst microinjection and the associated mouse colony management. The ideal candidate would have at least an MS or equivalent experience and be interested in applying these new techniques and in designing experiments to improve the field. The ability to work with multiple investigators in a team environment is a necessity. Send inquiries to Harold R. Wheeler, Human Resource Manager.

Postdoctoral Fellow

Sex Determination and the Y Chromosome

The laboratory of Elizabeth M. Simpson is involved in the construction of a "physical map of the murine Y chromosome" in order to expand investigation of mammalian sex determination. This genome based project requires an individual with a strong molecular biology background. Techniques employed would include the generation of "sequence tagged sites," construction of a YAC library, assembly of YAC contigs and computer database management. Send inquiries to Phyllis Mobraaten, Training Office.

600 Main St., Bar Harbor, ME 04609

(207) 288-3371

An Affirmative Action/Equal Opportunity Employer

**The Jackson
Laboratory**

FACULTY POSITIONS CANCER CENTER UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

Immediate opening for 5 senior tenured or junior tenure track positions in a newly formed interdepartmental Cancer Center. Rank will be commensurate with ability and experience. The appointment will be in one of the basic science or clinical departments. Laboratories for the Cancer Center are housed in a new building containing approximately 80,000 square feet of modern research space. Core facilities for tissue culture, media preparation, DNA synthesis, protein sequencing and peptide synthesis, fluorescence-activated cell sorting, small animal irradiation and transgenic mice are available. The position will be highly competitive with regard to start-up funds, laboratory space and salary.

The Cancer Center seeks to develop a broad program focusing on the control of normal and neoplastic cell growth and differentiation. Potential specific areas of interest include, but are not exclusive to, basic and clinical gene therapy, stem cell biology, receptor ligand interactions, cell-cycle regulation, second messenger signalling, transcriptional regulation, cell adherence proteins, transplantation biology, cancer cytogenetics and growth control genes.

Applicants should send a curriculum vitae, statement of research interests and names of three references to any of the three individuals listed below:

Dr. Michael R. Green,
Search Committee Chairman
Dr. Michael P. Czech, Director,
Program in Molecular Medicine or
Dr. Peter J. Quesenberry, Director,
Cancer Center

University of Massachusetts Medical Center
373 Plantation Street
Worcester, MA 01605

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

SCIENCE, TECHNOLOGY AND PUBLIC POLICY tenure-track teaching/research position. Life-sciences, chemistry, information/communications technologies backgrounds of particular interest. Send curriculum vitae, three reference letters and samples of writings bringing tools of natural science/engineering to bear on public-policy problems to: **Dean Henry Bienen, Woodrow Wilson School, Princeton University, Princeton, NJ 08544** by December 1, 1992. *Equal Opportunity/Affirmative Action Employer.*

The University of Alabama at Birmingham, *An Equal Opportunity/Affirmative Action Employer*, invites applications for **FACULTY APPOINTMENTS** in the Department of Pathology. An applicant should have an M.D., M.D.-Ph.D., or Ph.D. degree in one of the basic sciences such as biochemistry, cell biology, etc., and desire to focus his/her efforts on graduate education and research. Applicants will be considered who either have an existing independently funded research program or have a plan to develop such a program.

Academic rank and tenure are dependent upon the qualifications of the applicant.

Current curriculum vitae of interested persons should be forwarded to: **Jay M. McDonald, M.D., Professor and Chairman, Department of Pathology, The University of Alabama at Birmingham, University Station, Birmingham, AL 35294.**

POSTDOCTORAL POSITION: K⁺ CHANNEL GENE REGULATION

Postdoctoral position available immediately to define the lymphocyte-specific and mitogen-activation-dependent regulatory elements that control K⁺ channel gene (Kv1.3, Kv3.1) expression in normal and diseased lymphocytes. Previous experience in molecular biology required. Send curriculum vitae with references to: **Dr. K. George Chandy, Department of Physiology and Biophysics, University of California Irvine (UCI), Irvine, CA 92717. Telephone: 714-725-2133, FAX: 714-856-8540. UCI is an Equal Opportunity/Affirmative Action Employer.**

The University of Wisconsin Department of Surgery has a **POSTDOCTORAL POSITION** to study gene therapy approaches to endocrine cell transplantation. Experience in molecular biology including cloning, transfection, and gene expression systems. Experience in cell culture and immunochemical techniques desirable. Send résumé and three letters of recommendation to: **Dr. Debra Hullett, Surgery Department, 600 Highland Avenue, Madison, WI 53792-7375. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.**

Pioneer Hi-Bred International, Inc. seeks to fill a **POSTDOCTORAL POSITION** to conduct research to develop an environmental classification system for agricultural field crops, primarily hybrid corn. Primary responsibility for the identification, procurement and evaluation of climatic and edaphic factors critical in crop development, integration of identified variables with Pioneer's field performance databases and development of a classification system based upon those variables. Ph.D. in a biological science with a solid background in atmospheric science, agricultural meteorology and climatic modeling, knowledge of agricultural crop development, and experience utilizing Geographic Information Systems. Strong communication, interpersonal skills, and ability to interface effectively with individuals across disciplines. Salary commensurate with education and experience. Submit a letter of application, résumé, copies of academic transcripts, and names of references to: **Ms. Twila Carzoli, Pioneer Hi-Bred International, Inc., 7250 NW 62nd Avenue, Johnston, IA 50131. Telephone: 515-270-3749 FAX: 515-270-4312.**

POSTDOCTORAL POSITION in MOLECULAR NEUROBIOLOGY: Studies of nicotinic acetylcholine receptors of muscles and nerves. Projects involve cDNA cloning, *in vitro* mutagenesis, and expression for functional and structural analysis. A strong background in molecular biology is required. Some experience in biochemistry or neurobiology is preferred. Experience with high level expression in eukaryotic systems is especially desirable. Send curriculum vitae along with the names, addresses and telephone numbers of three references to: **Dr. Jon Lindstrom, Department of Neurosciences, University of Pennsylvania Medical School, 217 Stemmler Hall, 36th & Hamilton Walk, Philadelphia, PA 19104-6074. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study the development of the enteric nervous system. Experience in molecular biology, neuroscience and/or genetics essential. Send curriculum vitae and three references to: **Dr. Ann Ouyang, Department of Medicine, M.S. Hershey Medical Center, Pennsylvania State University College of Medicine, P.O. Box 850, Hershey, PA 17033. Fax: (717) 531-6770. Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL RESEARCH TRAINING PROGRAM: Molecular Approaches to Mental Illness, University of California, San Francisco (UCSF).

Positions open for 1992 and 1993 for individuals with M.D., M.D./Ph.D., or Ph.D. in a new NIMH-funded program in areas of basic science of relevance to psychiatry including genetics and neuroscience. Training faculty are from UCSF Department of Psychiatry and basic science departments. We are particularly interested in individuals who have completed three years of psychiatric training. *Women and minorities are encouraged to apply. U.S. citizens/permanent residents only* send curriculum vitae to: **Samuel Barondes, M.D., UCSF Box F-0984, San Francisco, CA 94143.**

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, IRVINE

Position available in Spring 1993 for **BIOCHEMIST** or **MOLECULAR BIOLOGIST** with training in Tumor Biology. Project involves RAR and RXR regulations of human melanocyte transformation. Send curriculum vitae, summary of research experiences, and names of three references to: **Dr. Frank L. Meyskens, Jr., UCI Medical Center, Clinical Cancer Center, 101 The City Drive, Route 81, Building 44, Orange, CA 92668.**

The University of California is an Equal Opportunity Employer.

CELLULAR IMMUNOLOGIST Parasites—Mycobacteria

POSTDOCTORAL POSITIONS available to study both human and murine cellular immune responses in *Leishmania*, *Trypanosoma cruzi*, or *Mycobacterium* infections. Emphasis is on the induction and expression of macrophage and T cell responses to defined microbial epitopes. Candidates with an interest in basic and applied research in tropical medicine, including international collaboration, are encouraged to apply. Competitive salary and benefits. Send curriculum vitae and three referee names to: **Dr. Steven G. Reed, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS available immediately in: **behavioral neuroscience** (sexual and maternal behavior, analgesia, learning and memory, epilepsy, recovery of function, visual perception), **neurochemistry** (steroid and benzodiazepine receptors), **enzyme inhibitor synthesis, membrane chemistry, and health sciences** (AIDS education, MS assessment). *Persons of ethnic minorities are encouraged to apply.* Details: **Barry R. Komisaruk, Director, Minority Biomedical Research Support Program, Rutgers University, Newark, NJ 07102; Telephone: (201) 648-5853; FAX: (201) 648-1102.**

POSTDOCTORAL RESEARCHERS

The Department of Physiology and Biophysics, University of California, Irvine, is developing a postdoctoral candidate pool for possible openings during the remainder of the 1991-92 fiscal year. Openings may be available in the following research areas: ion channels in lipid bilayers; physical chemistry of membranes; mechanisms and regulations of steroid hormone biosynthesis; exercise physiology; molecular properties of ion channels in excitable cell membranes; molecular and electrophysiological aspects of lymphocyte activation. Salary is in accordance with current NIH/NSF postdoctoral stipends which are based upon qualifications and years of prior, relevant postdoctoral experience. *Minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to: **Michael D. Cahalan, Ph.D., Chairman, Department of Physiology and Biophysics, University of California, Irvine, Irvine, CA 92717. The University of California, Irvine is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Available immediately to investigate expression and function of glutamate dehydrogenase in mammals. Experience in Molecular Biology and/or protein chemistry is required. Call or Address correspondence to: **Dr. Andreas Plaitakis, Department of Neurology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. Telephone (212) 241-7310 or (212) 241-4534.**

POSTDOCTORAL POSITIONS available immediately to study activation of protein kinase C and its role in signal transduction to nuclei. Projects employ membrane biophysics, nuclear magnetic resonance, and molecular biology methodology. Send curriculum vitae and at least three letters of reference to: **Dr. Julianne Sando, Department of Pharmacology, Box 448, University of Virginia School of Medicine, Charlottesville, VA 22908.**

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

The Neonatal Research Laboratory at Tulane University School of Medicine seeks individuals with skills in recombinant DNA techniques, RNA isolation and characterization, and protein purification to study the molecular regulation of cardiac development. The successful candidate will have the opportunity to develop his/her own research ideas. Funding is secure and salary is negotiable based on qualifications. Masters or doctoral degree preferred. Apply to: **Dr. Thomas Storch, Pediatrics Department, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE POSTDOCTORAL FELLOW

Positions available for persons with expertise in protein chemistry and/or molecular biology to participate in NIH-funded projects on immunoprotective determinants of *M. tuberculosis* and *L. pneumophila*. Send curriculum vitae, statement of future research interests, and letters of recommendation/reference to: **Dr. Marcus A. Horwitz, Department of Medicine, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90024-1688. FAX: 310-794-7156.**

POSTDOCTORAL RESEARCH FELLOW position available immediately in Molecular and Cell Biology. Experiences in Northern analysis, cell culture, biochemistry in fibrinolytic mediators or lipoproteins are preferred. Send application letter, curriculum vitae, recommendation letters or address and telephone numbers of references to: **Dr. X. Shen, Department of Internal Medicine and Physiology, University of Manitoba, 770 Bannatyne Avenue, BS439, Winnipeg, Manitoba, Canada R3E 0W3, FAX: 204-774-9517.**

POSTDOCTORAL FELLOW

Position available in the laboratory of Dr. John Krupinski. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of adenylyl cyclase. Emphasis will be placed on determining those structural features of the adenylyl cyclases that are responsible for mediating unique physiological responses. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to:

**Geisinger Human Resources Department (JK)
100 North Academy Avenue
Danville, PA 17822-1529
Equal Opportunity Employer.**

A **RESEARCH ASSOCIATE** position is available immediately for an individual with a background in nucleic acid biochemistry to join the laboratory of Thora Pederson, to accelerate a program addressing novel enzymatic activities in RNA. Salary range is \$22,000 to \$30,000 per year, depending on previous experience. Applicants should submit curriculum vitae and concurrently arrange to have at least two letters of recommendation sent to: **RNA Research Associate, c/o Personnel Department, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. Affirmative Action/Equal Opportunity Employer.**

**WASHINGTON
UNIVERSITY
DEPARTMENT OF
ANATOMY AND
NEUROBIOLOGY
FACULTY POSITIONS
IN NEUROSCIENCE**

Tenure track faculty positions are available in the Department of Anatomy and Neurobiology at Washington University School of Medicine. Over the next few years, we expect to recruit in several areas, from molecular to systems and computational neuroscience. At this stage we are especially interested in individuals taking innovative approaches to important questions in molecular, cellular and developmental neuroscience and in areas that bridge the cellular and systems levels.

The Department already houses more than a dozen active research labs in neurobiology, and it is part of a much larger interdepartmental Program in Neuroscience. Both the Department and the Program offer numerous opportunities for scientific interactions and collaborations. Our focus is on appointments at the Assistant Professor level, but appointments at a more senior level (Associate Professor or Professor) will also be considered.

Applicants should send a curriculum vitae, brief description of research interests, and names of references to: **Dr. David Van Essen, Head, Department of Anatomy and Neurobiology, Box 8108, Washington University Medical School, St. Louis, MO, 63110, USA.**

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



**University of Illinois
at Urbana-Champaign**

Director
Arnold O. and Mabel M. Beckman
Institute for Advanced Science and Technology

The Arnold O. and Mabel M. Beckman Institute is a broadly-based interdisciplinary research institute with parallel programs in the physical sciences and engineering and in the life and behavioral sciences. The primary mission of the Institute is to foster interdisciplinary work of the highest quality in an environment that transcends many of the limitations inherent in traditional university organizations and structures. The Institute now involves about 140 faculty members, 70 staff members, and 500 students and postdoctoral associates in 21 research programs.

Applications and nominations are invited for the position of Director of the Beckman Institute for Advanced Science and Technology of the University of Illinois at Urbana-Champaign. The Director of the Beckman Institute is expected to be a strong leader, widely recognized for intellectual accomplishment and for an ability to administer a complex, research-oriented organization. He or she should have an ability to understand and support multi-investigator interdisciplinary activities. Normally the Director would hold a doctoral degree in one of the disciplines represented in the Institute, but particularly relevant experience might obviate this requirement. Since the Institute is an integral part of the University of Illinois, interacting in complex ways with established academic disciplines and organizations, it is essential that the Director be familiar with the academic environment. Experience in academic administration is desirable.

Among the responsibilities of the Director are the following: To formulate or to identify new interdisciplinary programs for inclusion in the Institute; to oversee continuing evaluations of programs and participants of the Institute; to work with departments and colleges in attracting key faculty members to the Urbana-Champaign campus in support of strong, interdisciplinary research programs of interest to the Institute; to provide intellectual leadership in organizing seminars and conferences and in operating the extensive program for visitors; to work with other campus and University administrators in establishing and maintaining appropriate relationships between the Beckman Institute and other campus units; to manage the Institute's physical and financial assets; and to assist the Institute's faculty in acquiring external support for research. The Director possesses the standing of an academic dean on the Urbana-Champaign campus and reports to the Vice Chancellor for Academic Affairs.

Salary open. Position available July 1, 1993. To be assured of full consideration, nominations and applications (including curriculum vitae) should be submitted by December 1, 1992, to:

Larry R. Faulkner, Chair
Search Committee for the Director of the Beckman Institute
Office of the Vice Chancellor for Academic Affairs
University of Illinois at Urbana-Champaign
Swanlund Administration Building
601 East John Street
Champaign, Illinois 61820
Telephone: (217) 333-1350

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

Natural Products Discovery

Associate Scientist, (#92-75)

Responsibilities consist of development, validation and implementation of high throughput assays for drug discovery. Techniques involve radioligand binding, enzymatic and cellular functional response assays. Requirements include degree in Biochemistry or related field with 2-4 years of applicable experience.

Associate Scientist, (#92-53)

This candidate will be involved in the isolation, fermentation and extraction of micro-organisms for use in the Natural Products screening programs. Good sterile technique is required with a working knowledge of microbiology. A BS in Microbiology or equivalent experience is required.

PANLABS is an international company providing R&D services to the pharmaceutical industry worldwide, located north of Seattle. Submit resume/CV with 3 references to:

PANLABS, INC.
Human Resources (include #)
11804 North Creek Pkwy S.
Bothell, WA 98011-8805



PANLABS

An Equal Opportunity Employer



Equality of employment opportunity is University policy



SCHOOL OF ANATOMY

ASSOCIATE LECTURER/LECTURER

Ref. 392 - Tenured or Tenurable Appointment

Ref. 393 - Fixed Term Appointment

Salary: Associate Lecturer **A\$28,700 - A\$38,950** per annum;
Lecturer **A\$41,000 - A\$48,688** per annum.

The School of Anatomy has vacancies for two academic staff. Appointment will be made either at the level of associate lecturer or lecturer. Level of appointment and commencement salary are dependent on qualifications and experience. A clinical loading of A\$13,484 per annum will also be payable to an appointee at Lecturer level with medical qualifications registrable in NSW.

The School is responsible for teaching gross anatomy, histology, neuroanatomy and embryology to medical and science students. It has an active research program with particular strengths in neuroanatomy and developmental neurobiology.

The appointees will be required to teach gross anatomy and at least one other subject, and to develop a research program with the potential to attract external funding.

The minimum qualification for Associate Lecturer is a good Honours degree in a relevant discipline, or a medical degree. A Lecturer should, in addition, have a relevant PhD or equivalent. Experience in teaching, research or clinical practice would be an advantage.

Ref. 392 - Tenured or Tenurable: Appointment will either be with tenure or on the basis of a contract with provision for conversion to tenure.

Ref. 393 - Fixed Term: Appointment is on the basis of a fixed term of 3 years.

Applicants must indicate the level and type of appointment for which they wish to be considered by quoting the relevant reference number.

The positions are available from 1 February 1993. Membership of a University approved superannuation scheme is compulsory for new employees.

Further information from Associate Professor David Tracey on telephone (61 2) 697 2471.

Applications close 6 November 1992.

PLEASE QUOTE Appropriate Ref 392XX/393XX

APPLICATION PROCEDURE

Applicants should submit a written application **QUOTING REFERENCE NUMBER**. Include business and private telephone numbers; a complete resume, (copies of academic transcript and qualifications where appropriate); and the names, addresses (and preferably facsimile numbers) of at least two referees to: The Recruitment Officer, Staff Office, P.O. Box 1, Kensington, N.S.W. 2033 by applications close date. People from EEO groups are encouraged to apply.



"The Tree is not just a tree"

Staff Scientist - Neurobiology La Jolla Cancer Research Foundation

The La Jolla Cancer Research Foundation has openings for research staff scientists in its expanding program in neurobiology/neuropathology. Areas emphasized include, but are not restricted to, 1) neural development, 2) oncogenes/growth factor receptors and signal transduction and 3) brain tumor biology. Candidates must hold a Ph.D. or M.D. degree and have demonstrated exceptional accomplishments conducting a strong independent research program.

Applicants are requested to submit a curriculum vitae, a brief statement of current and future research and names of three references to:

Dr. Barbara Ranscht
Neurobiology Program
La Jolla Cancer Research Foundation
10901 North Torrey Pines Road
La Jolla, CA 92037



La Jolla Cancer Research Foundation is an Equal Opportunity Employer

Radiation Effects Research Foundation Hiroshima, Japan Resident Director

The U.S. National Academy of Sciences (NAS) is recruiting for a scientist/scientific administrator to serve as a (Resident) Director at the Radiation Effects Research Foundation (RERF) in Hiroshima, Japan. RERF is a private, non-profit foundation in Japan with laboratories in Hiroshima and Nagasaki with over 430 employees. The Foundation is equally funded by the Government of Japan, through the Ministry of Health and Welfare, and the U.S. Government, through the NAS with funds from the Department of Energy (DoE). RERF is also equally managed by citizens of the two countries. The RERF Board of Directors consists of twelve individuals (six Americans and six Japanese). Six of these Directors (three from each country) live in Hiroshima or Nagasaki and, as the Executive Committee, have responsibility for the day-to-day administration of the Foundation and all of the research activities conducted at RERF on the long-term follow-up of the late health effects among the survivors of the atomic bombs. Qualified candidates for this position must be U.S. citizens and have an M.D. or Ph.D. with extensive experience in scientific research, preferably radiation biology or a related research area, and management of a multi-disciplinary research program. U.S. (Resident) Directors are employees of the United States National Academy of Sciences and RERF. Salaries are commensurate with experience and are supplemented by relocation, housing and cost of living benefits. Although terms of office for Directors at RERF are for four years with a maximum of two terms (eight years), typical NAS appointments are for two years with extensions up to the eight years, if warranted. If you are interested in this position, send your resume and the names and addresses of at least three references to: Board on Radiation Effects Research (NAS 342-CE), National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, DC 20418. EOE.



The prestige of The Salk Institute, Government Services Division is based on a long history of quality biological research and production. As a contract facility, our primary purpose is to fill the various needs of the US Army and other government agencies through the work of our outstanding team of top notch scientific professionals.

If you are dedicated to quality and high standards, our current opportunity may be the perfect opportunity to join our dynamic team in scenic Swiftwater, PA.

SENIOR SCIENTIST- DIRECTOR OF PRODUCTION

The selected individual will be responsible for coordinating the efforts of a staff including 25 professionals in varied disciplines in the production of cell cultures, human use vaccines and diagnostic reagents. Related duties include all relevant documentation, scheduling and report generation.

Our ideal candidate will possess a PhD or equivalent degree in microbiology, a minimum of 5 years experience in biologics production or development as well as a thorough knowledge of 21 CFR, cGMP and biosafety in Microbiological and Biomedical Laboratories. Demonstrated supervisory/organizational skills and the ability to write scientific papers and reports are vital to this position. Knowledge of molecular biology, fermentation technology along with experience with a wide variety of viruses, bacteria and/or protozoa would be beneficial.

This exciting position provides an excellent opportunity to become part of our outstanding organization. The Salk Institute, offers excellent compensation including comprehensive benefits, a relocation package and a working environment second to none in the beautiful Pocono Mountains. Qualified individuals should forward CV to: Attn: A. Hovey, P.O. Box 250, Swiftwater, PA 18370. Equal Opportunity Employer.

The Salk Institute
Government Services Division

Group Leader, Clinical Pharmacokinetics

Play An Integral Role in the Global Submission Process

The Medical Research Division of American Cyanamid is recognized as a leader in the research and development of therapeutic compounds. Our products have been instrumental in the treatment of infectious diseases, cancer, cardiovascular and central nervous system diseases. We currently have an opportunity for a Group Leader, Clinical Pharmacokinetics in our dynamic organization.

Reporting to the Department Head of Pharmacokinetics Research, the successful candidate will possess a PhD or Pharm D in pharmacokinetics or related field and 5+ years' experience with a documented strong background in pharmacokinetics and pharmacodynamics research including supervisory experience.

Working closely with Clinical Research, Formulations Research, Biostatistics and the Office of Regulatory Affairs, you will play an integral role in designing pharmacokinetic studies, analyzing data, developing pharmacodynamic measures and dosing strategies, and preparing pharmacokinetics packages for global submissions.

We are located on a new \$150M, state-of-the-art facility in Rockland County, only 25 miles north of New York City. The salary is fully competitive and includes comprehensive benefits. For consideration, send your resume/c.v. with salary history to: Personnel, Dept. PM-SCI, Lederle Laboratories, 401 N. Middletown Road, Pearl River, NY 10965. An Equal Opportunity Employer M/F. Principals only. No search/ recruitment firms please.



Dedicated People Dedicated To People Since 1906.

MIT

FACULTY POSITION Department of Nuclear Engineering

The Department of Nuclear Engineering at MIT seeks candidates for a Senior Faculty Position in the area of Radiological Sciences. The successful candidate should be able to direct a program consisting of a number of junior and affiliated faculty and students in all areas of Radiological Sciences comprising radiation therapy, radiation biophysics and medical imaging. His/her own research should preferably be in experimental areas of Radiological Sciences. Candidates interested in using the capabilities of our 5 MW research reactor for medical-related research are encouraged. He/she should be capable of mounting a significant research program, develop funding and directing the thesis activities of graduate and undergraduate students.

The candidate should be capable of teaching a wide variety of courses in the general area of radiological sciences and related fields such as nuclear physics. He/she should be capable of interacting with other activities at MIT and with medical colleagues in the associated teaching hospitals to further develop a broad and outstanding academic program in Radiological Sciences.

All candidates should write to the address below, describing their professional interests and goals. Each application should include a curriculum vitae and the names and addresses of three or more references. Additional material describing the applicant's work, such as papers or technical reports, would also be helpful. All candidates should indicate citizenship and, in the case of non-U.S. citizens, describe their visa status. Send all applications to the search committee chairman, **Prof. Neil E. Todreas, Room 24-219, Massachusetts Institute of Technology, 77 Mass. Avenue, Cambridge, MA 02139-4307.**

MIT is an Equal Opportunity/Affirmative Action Employer

**Massachusetts
Institute of Technology**

U.S. DEPARTMENT OF ENERGY

POSTGRADUATE RESEARCH PROGRAMS

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

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

Information and applications:

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

RESEARCH OPPORTUNITIES *Postdoctoral Scientists*

Progenics Pharmaceuticals is a biotechnology company specializing in the discovery of novel treatments for HIV infection and other diseases. We are currently seeking highly motivated scientists with Ph.D. or M.D./Ph.D. degrees and 0-2 years of postdoctoral experience, to join our team. Experience in one or more of the following areas is required: molecular biology, protein chemistry, virology, immunology, cell biology.

Progenics actively collaborates with investigators in laboratories throughout the United States and Europe. Emphasis is placed on basic research and publication in peer reviewed journals. The research facilities are situated on a suburban campus 20 miles north of New York City.

Candidates should send their curriculum vitae, a description of their research experience and interests, and the names and addresses of three references to: **Human Resources, Progenics Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, NY 10591.**



Progenics
Pharmaceuticals, Inc.

Cancer Molecular Genetics

ONCOGENETICS, a newly-founded R&D and clinical oncology laboratory, is pioneering the development and application of new technologies for cancer screening, diagnosis, prognosis and followup. We offer an outstanding opportunity for exceptional individuals to become key members of the scientific team, which includes scientists in pathology, cytogenetics, and cellular immunology. The option to pursue your own grant-funded research through our allied non-profit research foundation also exists. A comprehensive salary and benefits package includes equity.

■ Director of Research & Development

A PhD or MD degree, extensive hands-on expertise, and a focus in molecular carcinogenesis is required. The ideal candidate will have the capability and interest to establish a network of external collaborations with academic and clinical institutions.

■ Director of Clinical Molecular Genetics

A PhD or MD degree and established expertise in genetic linkage and the detection of molecular deletions, mutations and insertions is required, as well as ABMG certification or eligibility in clinical molecular genetics.

Please send curriculum vitae including specific interests, publications and professional goals to:

Fredric J. Feldman, PhD,
ONCOGENETICS, Inc.,
Post Office Box 61073,
Phoenix, AZ 85082-1073.



ONCOGENETICS

POSITIONS OPEN

STAFF RESEARCH ASSOCIATE to conduct research in stratospheric dynamics and chemistry using numerical modeling to understand the causes of the ozone hole, and related problems. Develop numerical techniques to improve simulation of cross-polar flow in a high-resolution version of a global general circulation model; modify model boundary conditions and extend existing radiation parameterization to achieve a better simulation of polar stratospheric dynamics; and connect the resulting high-resolution model to drive a global-scale tracer-chemistry model. Requirements: Ph.D. in Atmospheric Sciences with research emphasis on numerical modeling of atmospheric dynamics; experience with global general circulation models of the atmosphere; knowledge of numerical methods relevant to the simulation of stratospheric flows in the high-latitudes; ability to handle large computer codes in FORTRAN and large data sets; experience with GCM model data analysis and visualization; Macintosh systems, and Sun and DEC workstation environments. Job location/interview: Los Angeles. Salary: \$34,300 per year. Send this ad and résumé to: **Job #WS 12846, P.O. Box 9560, Sacramento, CA 95823-0560** no later than November 7, 1992.

RESEARCH ASSOCIATE for cancer research institute in Southwest Ohio. To study the differential activation of indoleamine 2,3-dioxygenase gene (IDO) expression by Gama-interferon as against Alpha-interferon. Isolation and characterization of the regulatory elements that control the expression of IDO gene. Characterization of Gama-interferon mediated signal transduction. Work involves nuclear protein isolation, cloning of genes, constructing and screening cDNA libraries, *in vitro* translation of mRNA, two-dimensional gel electrophoresis and DNA sequence analysis. Job requires Ph.D. in Molecular Biology, Zoology, or Biochemistry and two years of experience as a research assistant. At least one year of this experience must be in DNA cloning, nucleic acid hybridization and protein purification. Must have at least one publication in the field of biomedical research. Must have experience in the signal transduction mechanism and in the effect of carcinogens such as caffeine in that mechanism and on gene expression (at least for three quarters). Teaching experience in developmental biology is required (at least one quarter). Must have at least one class in carcinogenesis and one in tumorigenesis. Experience may be gained before, during or after degree. Work 40 hours per week; 8:00 a.m. to 5:00 p.m. Salary: \$25,004 per year. *Must have proof of legal authority to work permanently in United States.* Send résumé in duplicate (NO CALLS) to: **J. Davies, JO#1338411, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

SENIOR RESEARCH ASSOCIATE—radiation biology and hematology. Participate in a research program to develop new strategies for the combination of monoclonal antibodies and other modalities (including chemotherapy and hyperthermia) for cancer treatment and to improve methods of bone marrow transplantation using radiation and hyperthermia. Teach residents, fellows, and technicians appropriate background and methodology and supervise their research. Perform appropriate data analysis, make scientific presentations and prepare manuscripts for publication. Minimum requirements: Completion of requirements for Ph.D. including a minimum combination of 10 years of graduate education, and research experience in hematopoiesis and/or radiation biology using growth factors, flow cytometry, monoclonal antibodies, patho-histological techniques, immuno-electron microscopy, tissue culture, and small animal handling. Salary, \$32,000 per year. Job/interview site: Duarte, CA. Send ad and résumé to **Job #WS 12869, P.O. Box 9560, Sacramento, CA 95823-0560** no later than November 7, 1992.

POSTDOCTORAL RESEARCH ASSOCIATE. Psychophysiological, physiologist, or pharmacologist to study cardiovascular effects of alcohol abuse and work with students and faculty in Biological Psychology Ph.D. program, University of Oklahoma Health Sciences Center. Must be Ph.D./M.D. and U.S. citizen/permanent resident. Salary: \$17,000 to \$31,500 per year based on experience. Contact: **William R. Lovallo, Ph.D., Director, Behavioral Sciences Laboratories (151A), VA Medical Center, 921 NE 13th Street, Oklahoma City OK 73104, telephone: (405) 270-0501, extension 3124.** The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE. Ph.D. in Physics, specialty in Low Temperature Physics of critical transport phenomena in fluids. Two years of postdoctoral experience in Non-Linear Fluid Hydrodynamics, both experimental and theoretical. At least four publications in refereed scientific journals on hydrodynamics. Will construct apparatus to study equilibration phenomena near the liquid-vapor critical point of a cryogenic fluid, helium 3. Develop highly sensitive methods to measure both (1) vertical fluid density profile in the cell from gravity field and (2) the temperature inside the fluid with an extremely high resolution. Develop method for automatic data acquisition, reduction and analysis. Develop a hydrodynamic theory to describe equilibration phenomena, both in density and temperature near the critical point to compare with the experimental results. Skill and experience in writing technical reports on project for publication in scientific journals. Salary \$28,100 per year; 40 hours per week, 9:00 a.m. to 5:00 p.m. Apply: **Employment Security Commission, 516 North Mangum Street, Durham, NC 27701** or your nearest **Job Service Office.** Refer to **Job Order # NC3020565, DOT Code 090.227-010.** State Social Security Number. *If not a U.S. citizen, state basis for work authorization in the United States.*

COLUMBIA UNIVERSITY DEPARTMENT OF PSYCHIATRY

Full-time position available as **ASSOCIATE RESEARCH SCIENTIST** for qualified candidate to work on theoretical aspects of human linkage analysis using mathematical statistics principles. Applicant must be familiar with linkage programs, computer simulation, and PC compatible workstations running under OS/2. Ph.D. degree and minimum three years of applied experience in the field required. Send curriculum vitae to: **Jurg Ott, Ph.D., Department of Psychiatry, Columbia University, 722 West 168th Street, Unit 58, New York, NY 10032.** Affirmative Action/Equal Opportunity Employer.

MOLECULAR GENETICIST/BIOLOGIST: a two-year appointment beginning upon selection of qualified candidate to implement molecular strategies and techniques needed to describe plant genetic uniqueness and genomic variation. Various DNA technologies including single locus and multilocus PCR-based typing/fingerprinting, and related STS-based mapping strategies will be employed. Experience in molecular genetics, particularly sequencing, mapping, and informatics is essential. Send curriculum vitae and three letters of recommendation to: **Dr. Stephen Kresovich, USDA-ARS, Plant Genetic Resources Unit, Cornell University, Geneva, NY 14456-0462; Telephone: 315-787-2244.** *ARS is an Equal Opportunity Employer.*

BOTANIST ST. LAWRENCE UNIVERSITY

We seek a broadly trained botanist to teach general ecology, vascular plants, and some combination of courses from the applicant's field of expertise, and/or the environmental sciences. Ph.D. expected. The successful applicant will be expected to develop an active research program involving plants, preferably field-oriented, which will involve undergraduate student participation. Applicants with an interest in interdisciplinary teaching will be given preference. This position is a tenure-track appointment to begin in August 1993. Review of complete applications will begin November 20, 1992. Send curriculum vitae and two letters of reference to:

**Dr. Kenneth L. Crowell, Search Chair
Department of Biology
St. Lawrence University
Canton, NY 13617**

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

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POSITIONS OPEN

RESEARCH SCIENTIST, VASCULAR BIOLOGY. This position is in an interdisciplinary group with research activities in vascular biology, atherosclerosis, tissue engineering, and related areas. Experience in mammalian cell culture required. Qualifications include a Ph.D. and the ability to work independently. The person selected will have the opportunity to initiate new research areas, to work with graduate students, and to teach on a limited basis. Level of appointment and salary dependent on qualifications. Starting date negotiable. Send curriculum vitae and names and addresses of three references to: **Dr. Robert M. Nerem, Bioengineering Center, Georgia Institute of Technology, Atlanta, GA 30332-0405, Telephone: (404) 894-2768.** Georgia Tech is an Equal Opportunity Employer.

FBI LABORATORY MOLECULAR BIOLOGIST

The Forensic Science Research Unit of the FBI Laboratory invites applications of Ph.D. Molecular Biologists to conduct research to develop new and/or improved forensic methods for the analysis of trace biological evidence. The research unit is well equipped with an automated sequencer, oligonucleotide synthesizer, and ABI Genescanner, PCR thermocycler, and electrophoretic apparatuses. The Molecular Biologist is also expected to publish research results in recognized scientific journals, participate in scientific meetings, and conduct training in specialized schools for federal, state, and local crime laboratory personnel. The FBI Laboratory's Forensic Science Research and Training Center (FSRTC) is located in an academic setting at the FBI Academy in Quantico, Virginia. Please send résumé to or contact: **SSA Stephen P. Allen, Jr., FSRTC, FBI Academy, Quantico, VA 22135** by January 15, 1993; **Telephone: (703) 640-1113.** The FBI is an Equal Opportunity Employer. U.S. Citizenship is required.

RESEARCH SCIENTIST MOLECULAR BIOLOGY

We are Bio-Rad Laboratories, a world leader in life science research products, clinical diagnostics and analytical instruments and rated as one of the fastest growing companies in Northern California.

The successful candidate will have a Ph.D. or equivalent with an emphasis in Molecular Biology or an M.S. with equivalent experience. Expertise in nucleic acid amplification techniques essential. Experience with clinical samples desirable.

For consideration, send your résumé to: **Bio-Rad Laboratories, Department 441, 2000 Alfred Nobel Drive, Hercules, CA 94547.** Equal Opportunity Employer, M/F/D/V.

BIO-RAD
Bio-Rad Laboratories

STAFF SCIENTIST

Molecular Oncology Inc., a fast-growing biotechnology company in Gaithersburg, Maryland has an opportunity for a Scientist or Postdoctoral Scientist. Experience with septic shock or vascular leakage syndrome in animal model is highly desirable. Candidate for this position must have a Ph.D. in Cell Biology, Immunology, Biochemistry or related fields.

At Molecular Oncology you'll enjoy working in a professional atmosphere with a highly competitive salary and a comprehensive benefits program. For confidential consideration, please send two (2) copies of your résumé to:

**Molecular Oncology
Attention: CL
19 Firstfield Road
Gaithersburg, MD 20878**

TOXICOLOGIST. Position available immediately for a Ph.D. (or M.S. with experience) with expertise in aquatic toxicology to evaluate lethal and sublethal responses of estuarine fish to pesticides. Anticipated funding for 18 months at a salary up to \$30,000 per year, with opportunities for extension. Candidates should send curriculum vitae (with names of 3 references) to: **Dr. Bob Van Dolah, Marine Resources Research Institute (SCMRR), P.O. Box 12559, Charleston, SC 29422** by 25 November 1992. The SCMRR does not discriminate on the basis of race, sex, color, national origin, religion, age or disability.

BIOLOGY FACULTY POSITIONS

The Department of Biology, Indiana University-Purdue University at Indianapolis, invites applications for three tenure-track positions at the Assistant Professor level starting August 1, 1993. Applicants for the positions must have postdoctoral training. We seek candidates who are committed to excellence in the complementary missions of research and teaching. Each successful candidate is expected to develop an active, externally funded research program and contribute to the undergraduate and graduate teaching mission of the Department. The salary is competitive and substantial start-up funds are available. Intra- and interdepartmental collaborative research efforts are encouraged and supported; adjunct appointments to programs or departments within the Indiana University School of Medicine will be negotiated.

Indiana University-Purdue University at Indianapolis is the third largest University in the state, with more than 28,000 students, 2,000 faculty, and 165 degree programs in 17 Schools and Divisions. The Department of Biology is part of the School of Science and currently has 17 full time faculty of professorial rank. Graduate degrees in Biology are offered at both the Master's and the Ph.D. level. The Department occupies new research and teaching facilities adjacent to the Indiana University School of Medicine. Indianapolis is the twelfth largest city in the United States. The city uniquely combines the cultural amenities of urban life with the residential qualities of smaller communities, and is also highly affordable.

Candidates with the following areas of expertise will be considered:

IMMUNOLOGY: Candidates should be knowledgeable in immunology at the molecular, cellular and organismal level, with research interests in basic immunological processes or immunologic aspects of disease.

CELL/DEVELOPMENTAL BIOLOGY: We are interested in candidates with research interests in the regulation of cellular and/or developmental processes at the molecular or biochemical level.

ENVIRONMENTAL TOXICOLOGY: Candidates should be knowledgeable in basic environmental biology and have research interests in the cellular and molecular effects of toxic substances on living tissues and organisms.

PHYSIOLOGY: We seek an animal physiologist with research interests in the mechanisms of hormone action; however, other research areas in animal physiology will be considered.

Applicants should send a curriculum vitae, three letters of recommendation, and a statement of their research and teaching interests to Dr. N. Douglas Lees, Chairman, Department of Biology, Purdue University School of Science, 723 West Michigan Street, Indianapolis, Indiana 46202-5132. Applications must be received by December 15, 1992.

Indiana University is an Equal Opportunity - Affirmative Action Employer. Women and minority candidates are particularly encouraged to apply.

MOLECULAR MODELING SCIENTIST

At Sandoz Pharmaceuticals, research is the tool by which we gain the knowledge needed to improve the lives of countless thousands across the country and around the world. That's why we've committed substantial resources to expanding our Research Institute and its state-of-the-art technologies. If your career belongs on the leading edge of scientific research, you belong at Sandoz.

We are looking for a Computational Scientist to join the Molecular Modeling Group at Sandoz Research Institute. The candidate should be experienced in macromolecular modeling. Experience in computational studies of protein and/or nucleic acid systems by methods such as molecular mechanics, molecular dynamics, free-energy methods and homology analysis is expected. The position requires participation in a highly interactive, interdisciplinary approach to structure function elucidation as used in a rational drug design program. Such studies will require collaboration with Biochemists, Molecular Biologists, Physical Chemists (NMR and X-ray), and Medicinal Chemists. Good interpersonal and communication skills are necessary for the position.

The Molecular Modeling Group has a robust, dedicated computing resource which includes a supercomputer, high-end graphics workstations and a full suite of computational chemistry software. Being part of the research team at Sandoz has many advantages. Our salaries and benefits programs are designed to attract top candidates and provide them with the resources to produce their best. Comprehensive health, dental, and savings plans as well as fitness and athletic facilities are all provided at our attractive location in northwest New Jersey, which also allows for outstanding academic, cultural and outdoor pursuits. For prompt, confidential consideration, respond to position #2407 by forwarding your resume and salary requirements, to:

SANDOZ PHARMACEUTICALS CORP
SRI Staffing Department
Building 403/100
East Hanover, New Jersey 07936-1080

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RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP programs.

PROJECT LEADER, PLANT SECONDARY METABOLISM (JOB #1355-A) - We have an immediate opening for a highly motivated scientist to develop a research program investigating the manipulation of plant secondary metabolites for crop improvement. This position will demand extensive interaction with scientists from many different disciplines and will be an important addition to our ongoing research program of identifying agronomically useful genes. **EDUCATION/EXPERIENCE:** Ph.D. or equivalent experience in organic chemistry, biochemistry, molecular biology or related field plus 1-2 years relevant post-doctoral or laboratory experience. Research experience in the elucidation or manipulation of plant secondary metabolite pathways is required.

SENIOR RESEARCH ASSOCIATE (JOB #1369) - We have an immediate opening in the gene expression group for an individual to participate in the isolation and testing of genes and promoter systems for novel gene expression in maize. This position will require extensive research experience in molecular biology, focusing on the construction of cDNA libraries and the functional analysis of elements (cis and trans) that participate in the regulation of eukaryotic gene expression in plants. **EDUCATION/EXPERIENCE:** MS degree in molecular biology, biochemistry or related field plus 2 years directly related laboratory experience; or 4 years directly related lab experience with a 4-year University degree.

Applications received by **NOVEMBER 13, 1992** will be assured of consideration. However, applications will be considered until the positions are filled.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity Employer. Please send **TWO (2)** resumes and indicate in your correspondence the JOB #, the names, addresses and telephone numbers of three references to:



PIONEER

PIONEER HI-BRED INTERNATIONAL, INC.
Plant Breeding Division
Department of Biotechnology Research
Attn: Amy LaMotte JOB# _____
P.O. Box 1004
Johnston, IA 50131-1004

**POSTDOCTORAL FELLOWSHIPS
IN THE DEPARTMENT OF ANATOMY AND
NEUROBIOLOGY
UNIVERSITY OF CALIFORNIA, IRVINE**

Several positions for research in individual laboratories in the Department are available for candidates who have demonstrated research promise at the predoctoral or postdoctoral level. The emphasis of research in the Department is in the Neurosciences with special expertise in neuromorphology, sensory physiology, and molecular neurobiology. The faculty for the Department and their neurobiology. The faculty of the Department and their research interests are:

Dr. Robert Blank:	Eye movement control, physiology of upper airway
Dr. James Fallon:	Chemical neuroanatomy, transmitters and growth factors
Dr. Christine Gall:	Limbic/olfactory anatomy, neurotrophic factors, neuronal gene expression
Dr. Roland Giolli:	Visuomotor system: structure/function relationships
Dr. Edward Jones:	Transmitter regulation in primate cerebral cortex
Dr. Glenn Kageyama:	Oxidative metabolic development and plasticity
Dr. Leonard Kitzes:	Auditory system anatomy and physiology
Dr. W. Ian Lipkin:	Neurotropic viruses, viral vectors
Dr. Sandra Loughlin:	Neomamines, peptides and growth factors and their receptors.
Dr. Diane O'Dowd:	Function and regulation of ion channels in Drosophila.
Dr. Charles Ribak:	Epilepsy, neurotransmitters and hippocampal circuits.
Dr. Richard Robertson:	Thalamocortical development
Dr. Malcolm Semple:	Auditory processing
Dr. Martin Smith:	Cellular and molecular aspects of synaptogenesis.
Dr. John Swett:	Spinal cord and peripheral nervous system.

Applications or inquiries for additional information should be sent to:

**Dr. Edward G. Jones, Professor and Chairman
Department of Anatomy and Neurobiology
University of California, Irvine
Med Surge II, Room 364
Irvine, CA 92717**

An affirmative action/equal opportunity employer

**DEAN OF RESEARCH - COOK COLLEGE/
DIRECTOR OF RESEARCH
NEW JERSEY AGRICULTURAL EXPERIMENT STATION**

Cook College, Rutgers - The State University of New Jersey, New Brunswick, N.J. invites nominations and applications for the position of Dean of Research - Cook College/Director of Research New Jersey Agricultural Experiment Station. The New Jersey Agricultural Experiment Station conducts basic and applied research designed to meet the challenges posed by New Jersey's extraordinary diverse economy and environment. The station sponsors programs with faculty from throughout the university who are trained in a wide range of scientific disciplines and who conduct research at the forefront of their fields. The Experiment Station provides a unique, multidisciplinary structure that fosters innovative solutions to today's complex problems, and encourages novel research approaches aimed at ensuring a healthy and dynamic state economy while protecting our fragile environment and finite natural resources.

The Dean/Director is responsible for directing and administering the state-wide research programs of the Experiment Station in the agricultural, environmental, food, life, and marine sciences. The Dean/Director will provide leadership for the research activities of the Academic Department and the Research Centers and Institutes associated with Cook College, the College of Agriculture and Natural Resources. The research component of the New Jersey Agricultural experiment Station totals approximately \$32 m in state, federal, and extensively with appropriate state and federal government bodies, and will provide leadership for the College, and the Experiment Station in identifying and securing principal sources of outside funding from state and federal agencies, industry, and commodity groups. The Dean/Director reports to the Executive Dean/Executive Director of Agriculture and Natural Resources.

Requirements include an earned Doctorate in an appropriate discipline. An outstanding research background, and a demonstrated administrative competency in program development and leadership, fiscal planning, grant procurement, budget and personnel management are essential. Familiarity with operations of land-grant institutions is desirable. Applicant must qualify for faculty appointment at the rank of full professor with tenure.

Interested applicants should submit a current curriculum vitae and names, addresses and telephone numbers of three reference by December 1, 1992 to:

Dr. Richard A. Lutz
Chair of the Search and Screen Committee
Cook College, Rutgers University
Office of Personnel
P.O. Box 231, Martin Hall
New Brunswick, New Jersey 08903-0231

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

Rutgers University is an Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK POSITIONS IN BIOLOGY

As part of its continuing dynamic growth, the Department of Biological Sciences at the Univ. of Nevada, Las Vegas will be filling two or three tenure-track positions (assistant or associate professors) in: (I) Eukaryotic Cell Biology. The area of research is open. Teaching will include a core undergraduate cell biology course and an upper level undergraduate/graduate course in the applicant's speciality. (II) Virology. Preference will be given to applicants interested in the basic understanding of viruses and their function, regardless of the host system. Teaching will include an upper level under-graduate/graduate course in virology, a graduate course in the candidate's area of specialization, and occasional participation in the department's core program for biology majors. (III) Ichthyology - ecological / evolutionary genetics. The successful candidate will be a broadly trained scientist whose work represents an interface between evolutionary and ecological, or ecological and physiological, aspects of fish genetics. Teaching will include both undergraduate and graduate courses in evolution, ecology and/or physiology. All Applicants must hold a Ph.D. with post-doctoral experience preferred. The successful candidates will maintain vigorous, independently funded research programs and provide graduate training in the department's growing Ph.D. program. Competitive salaries, start-up funds, and modern facilities will be offered. Anticipated starting date for all positions is August, 1993.

The Dept. of Biological Sciences currently has 26 faculty members, 35 graduate students and more than 500 undergraduate majors. Projections indicate sustained growth through the current decade. Applicants (who should clearly indicate which position they are applying for) should send a statement of teaching and current and future research interests, a curriculum vitae, up to three publications, and three reference letters to: Department of Biological Sciences, c/o Dr. Warren W. Burggren, Chairman, University of Nevada, Las Vegas, 4505 Maryland Parkway, Box 4004, NV 89154-4004. Fax (702)739-3956. All application materials must be received by November 13, 1992. The Univ. of Nevada, Las Vegas is an equal opportunity/affirmative action employer. UNLV employs only US citizens and aliens authorized to work in the U.S. Applications from women, members of minority groups and foreign nationals are actively sought.

THE GEORGE WASHINGTON UNIVERSITY

The Department of Biological Sciences of the Columbian college and Graduate School of Arts and Sciences invites applications for the position of:

**RONALD B. WEINTRAUB RESEARCH PROFESSOR OF
BIOLOGICAL SCIENCES**

This tenure -track position will be filled at the Assistant Professor level by a scientist using molecular or cellular techniques to investigate problems of transcellular or intracellular transport in microorganisms, plants or animals.

Candidates should have postdoctoral experience and should be prepared to develop a research program involving graduate and undergraduate students. Substantial start-up funds are available. In addition to training students in research, the Ronald B. Weintraub Research Professor will offer one or two graduate courses per year. The starting date for this position will be July 1, 1993.

Please send a letter of application describing your research goals for the next five years as well as your teaching interests, a curriculum vitae, and the names, addresses and telephone numbers of three to five referees to:

**Randall Packer, Chairperson
Department of Biological Sciences
307 Lisner Hall
The George Washington University
Washington, DC 20052**

Review of applications will begin on December 1, 1992 and will continue until the position is filled.

The George Washington University is an Equal Opportunity, Affirmative Action Employer.

SHAPE THE FUTURE, SHARE THE REWARDS.

When you bring your talents to Hawaii Biotech, you'll find an exciting young company which values and rewards your independence, creativity and initiative. In our labs overlooking Pearl Harbor, you'll work with a bright youthful staff and grow with our company while enjoying the beauty and aloha of Hawaii.

DIRECTOR, VACCINE R&D

Hawaii Biotech is seeking a high energy, creative and experienced Ph.D. or M.D. research manager to drive our dengue virus vaccine program. With hands-on involvement, you will lead our established research which focuses on development of a tetravalent subunit vaccine while exploring state-of-the art alternative strategies. Additionally, you will lead our molecular biology staff in the development of new product ideas and accompanying grant, contract and business proposals. Proven experience in multiple aspects of vaccine research and development is required. A virology background and yeast expression experience are desirable.

DIRECTOR, IMMUNOLOGY

Your scientific expertise and leadership will help shape our business in this highly responsible position. Taking a hands-on approach, you will lead research focused on the development of immunodirected therapies including prodrugs, bispecific antibodies and other highly innovative uses for mAbs. Additionally, you will develop new product proposals, develop contract immunoassay research, and prepare grant proposals. Industry management experience is highly desirable.

■ PROTEIN BIOCHEMIST

Recent Ph.D. in biochemistry to participate in expression and purification of recombinant dengue virus proteins for vaccine development. Demonstrated skill required in culturing microorganisms for heterologous protein expression, in modern separation techniques for protein purification, and in protein characterization, validation, processing, and methods development. (Reference Job Code 301)

■ BACTERIOLOGIST

Recent Ph.D. or experienced M.S. in microbiology/immunology to participate in studies of enteric bacterial pathogens. Experience in culturing bacterial pathogens required, and experience in protein purification and ELISA development desirable. (Reference Job Code 302)

■ IMMUNOLOGIST

We're seeking a recent Ph.D. for immunoassay development and antibody/enzyme (Urease) conjugation. (Reference Job Code 303)

Our closely held company offers competitive salaries, excellent benefits and exceptional opportunities for ownership and growth. We encourage you to send your curriculum vitae with three references to:

**Hawaii Biotechnology Group, Inc.,
P.O. Box 1057, Honolulu, Hawaii
96701.**



Hawaii Biotechnology Group, Inc.

BASF Bioresearch Corporation

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

Mammalian Cell Culture Scientist

We are seeking a scientist to set up and operate a laboratory for preparative cell culture. The successful candidate will have had experience in spinner culture and 20-75 liter scale bioreactors for the production of cell mass and heterologous proteins. Preference will be given to applicants who have experience with a variety of expression systems such as baculovirus, CHO cells, recombinant myeloma cells and hybridomas. The ideal candidate will have optimized low protein/serum free media and conditions for cell growth and product formation.

Qualifications required are a Ph.D. in a related area with at least 2 years of industrial experience in preparative cell culture, or alternatively a BS/MS from the life sciences or biochemical engineering with at least 5-10 years' experience in various aspects of preparative cell culture. **Dept. PD1**

Fermentation Scientist

The successful applicant for this position will conduct and supervise microbial fermentation process development laboratory activities at the 20-75 liter scale. The candidate will be responsible for fermentation methodology development for a variety of protein therapeutics and reagents, as well as scale up and transfer of operations to the 3,000 liter scale for production of materials for GMP clinical trials and subsequent manufacturing.

We are seeking a Ph.D. biochemical engineer or microbial physiologist with at least 2-4 years of industrial experience in fermentation process development with yeast and bacterial heterologous protein expression systems. The candidate will be responsible for developing and enhancing our technical proficiency in this area. Experience with highly instrumented computer controlled fermentation equipment and appropriate analytical methods is highly desired. **Dept. PD2**

Senior Process Engineer

The qualified candidate will be responsible for the start-up and operation of fermentation and primary recovery equipment in the new BASF Bioresearch Corporation biologics pilot plant. This individual will supervise the development of methods and SOP's as required for successful GMP production of materials for clinical trials. An MS in chemical or biochemical engineering with at least 5-8 years' experience in fermentation operations is required, as well as a background in cGMP documentation and procedures. Familiarity with distributed control systems, integrated materials and maintenance management concepts would be a plus. **Dept. P03**

Senior Scientist

Biochemistry

The qualified individual will be responsible for the development of strategies and protocols for the purification of proteins to be used as drug targets or novel therapies. This person should have extensive background in biochemistry, enzymology, protein chemistry and experience in the purification of novel proteins from complex mixtures at small to medium scale. A Ph.D. with at least 2 plus years' postdoctoral training or an MS with at least 10 plus years' experience is preferred. **Dept. BC1**

Research Associate

Molecular Biology

The selected candidate will have a strong background in cDNA cloning, tissue culture techniques, expression of recombinant proteins in mammalian systems or promoter analysis. Requires an MS in biology or comparable work experience and at least 2-3 years' laboratory experience in molecular biology. Familiarity with PC or MicroVax based DNA analysis software packages is a plus. **Dept. MB1**

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

BASF

POSITIONS OPEN

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Available immediately for studies of antioxidant enzyme gene expression in SOD-1 transgenic mice and in cultured neurons. Experience with *in situ* hybridization, cDNA cloning and molecular biology techniques preferred. Send curriculum vitae and references to: **Dr. Pak H. Chan, Director, CNS Injury and Edema Research Center, Box 0114, University of California, San Francisco, 505 Parnassus Avenue, San Francisco, CA 94143-0114. An Equal Opportunity Employer.**

CHEMIST, PHARMACEUTICAL (Senior Research Chemist, Animal Formulation Development)—Develop analytical methods for pharmaceuticals in variety of matrices including formulations, medicated feeds, and biological fluids. Characterization of organic compounds to define formulation stability problems using both physical organic chemistry and statistically designed experiments. Perform preformulation/formulation studies to describe on molecular basis the properties of pharmaceutical dosage forms. Use physicochemical, organic mechanistic, organic structural and analytical expertise in the rational design and development of pharmaceutical formulations for animal health products based on chemical structure properties. 40 hours per week, 8:30 a.m. to 5:00 p.m., salary \$4,408 per month. Ph.D. in Pharmaceutical Chemistry plus one year of experience in job or one year of experience as Ph.D. Level Research. Experience must include analysis using High Performance Liquid and Gas Chromatographies, product stability protocols and preformulation studies and working knowledge of pharmacokinetics and pharmaceutical chemistry of peptides. Relevant publications in peer reviewed journals required. Westpoint, Pennsylvania location. *Must have proof of legal authority to work in U.S.*—Submit résumé or curriculum vitae to: Philadelphia Job Bank, 444 North 3rd Street—3rd Floor, Philadelphia, PA 19123, Job Order #4487994.

LOYOLA UNIVERSITY CHICAGO MOLECULAR VIROLOGIST IMMUNOLOGIST

An excellent opportunity exists at Loyola University Medical Center for a Immunologist with experience in vaccine development and a Molecular Virologist with experience in Papillomavirus research. Join the new Loyola Viral Oncology group and work in our new Cancer Center.

Applicants will develop their research programs and establish grants. Salary and academic rank dependent on the candidate's background. Please forward curriculum vitae to: **Gregorio Delgado, M.D., Professor and Chair, Department of OB/GYN, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60153 Telephone: 708-216-3383. Or contact: Lutz Gissmann, Ph.D., Director Designate, Division of Viral Oncology, Loyola University Medical Center, 49-6221-424603.**

ANNOUNCEMENTS

UPDATE ANNOUNCEMENT. Symposium on Florida Keys Regional Ecosystem, Miami, Florida, 16–20 November 1992. **New session added on Hurricane Andrew effects on South Florida**, with panel and round table. Other sessions include geology, physical and chemical processes, biotic processes, stresses and events, global change, and policy. For further information, contact: **Chris Harwell, RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149, Telephone: (305) 361-4168.**

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GRADUATE STUDENT, PRE-, POST-, AND SENIOR POSTDOCTORAL FELLOWSHIPS in American History and material culture, anthropology, biological sciences, earth sciences, history of art, history of science and technology. Tenable in residence at the Smithsonian and its facilities. Stipends and tenure vary.

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PHARMACEUTICAL DESIGN USING EPIOTOPE SELECTION TECHNOLOGIES

February 1–2, 1993; Hyatt Ricketts, Palo Alto, CA. **SPEAKERS:** G. Smith, M. Geysen, R. Balint, R. Houghten, J. Wells, R. Hoess, K. Lam, R. Ladner, M. Kahn, W. Dower, J. Winter, C. Craik, L. Loeb, A. Ellington, L. Griffin, J. Szostak, S. Fodor, C. Tuerk, J. Blancy, C. Barbas, F. Cohen, D. Burton, B. McDowell, J. Marks. **Organizers:** James Larrick; Robert Balint. **Abstracts due:** January 15, 1993. **Sponsor:** Palo Alto Institute of Molecular Medicine; 2462 Wyandotte Street, Mountain View, CA 94043; FAX: 415-851-3959; Telephone: 415-694-4996.

MEETINGS

NITRIC OXIDE IN HEALTH AND DISEASE

A symposium sponsored by the Environmental and Occupational Health Sciences Institute (EOHSI) at Rutgers University and UMDNJ—Robert Wood Johnson Medical School and The Cancer Institute of New Jersey. June 21–24, 1993. For information contact:

Vicki Leyton
Environmental and Occupational Health Sciences
Institute
681 Frelinghuysen Road
Piscataway, NJ 08854-1179
Telephone: (909) 932-0202; FAX: (908) 932-0131

SECOND BIENNIAL SYMPOSIUM ON BIOGEOCHEMISTRY OF WETLANDS

To be held at the Hilton Hotel, Baton Rouge, Louisiana, 22–24 February 1993. Sponsored by the Wetland Biogeochemistry Institute, Louisiana State University. Topics to be included will be: the role of wetlands in global climate change, the use of wetland biogeochemical processes to characterize regulatory wetlands, toxic heavy metal chemistry in wetlands, reactions of toxic organics in wetlands, the role of wetlands in improving water quality, plant-soil interactions in wetlands, and nutrient cycling in wetland ecosystems. Persons interested in making a presentation or attending the symposium should contact: **William H. Patrick, Jr. or Karen Gros, Wetland Biogeochemistry Institute, Louisiana State University, Baton Rouge, LA 70803. Telephone: 504-388-8810, FAX: 504-388-6423.**

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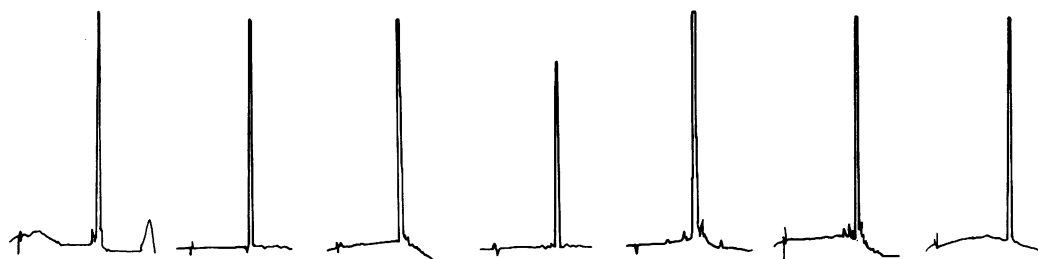
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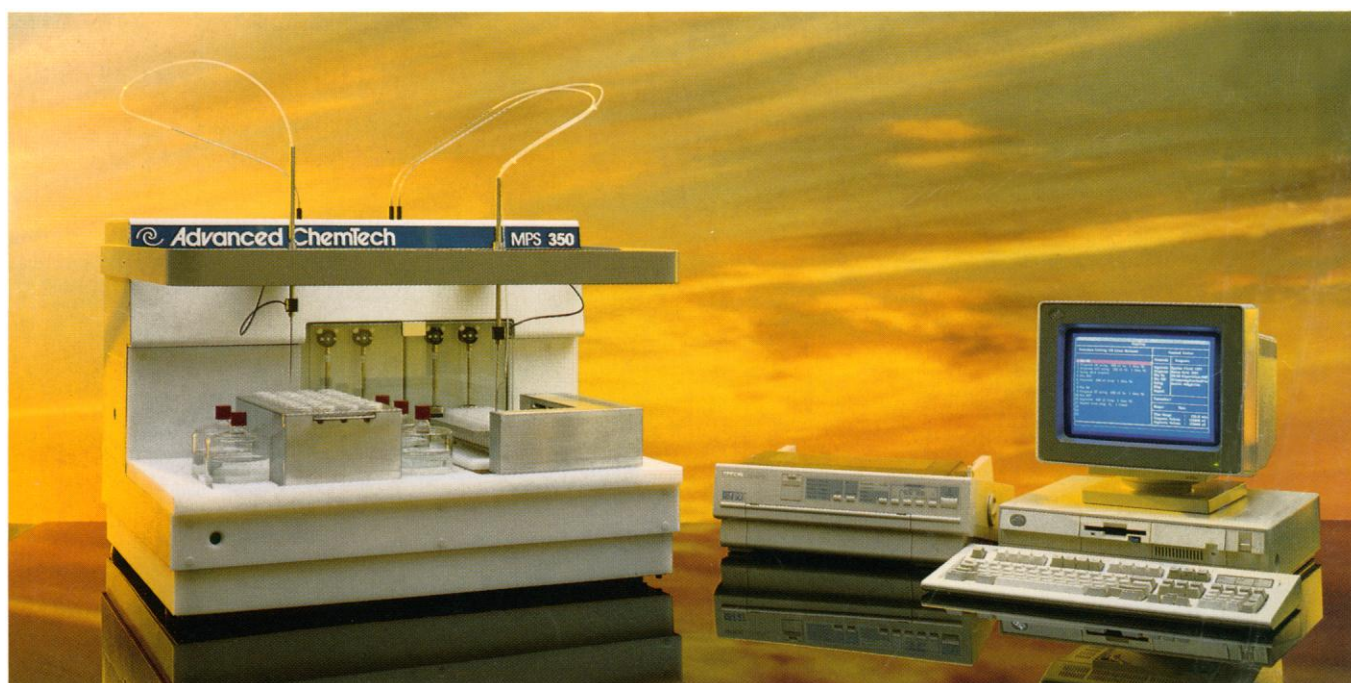
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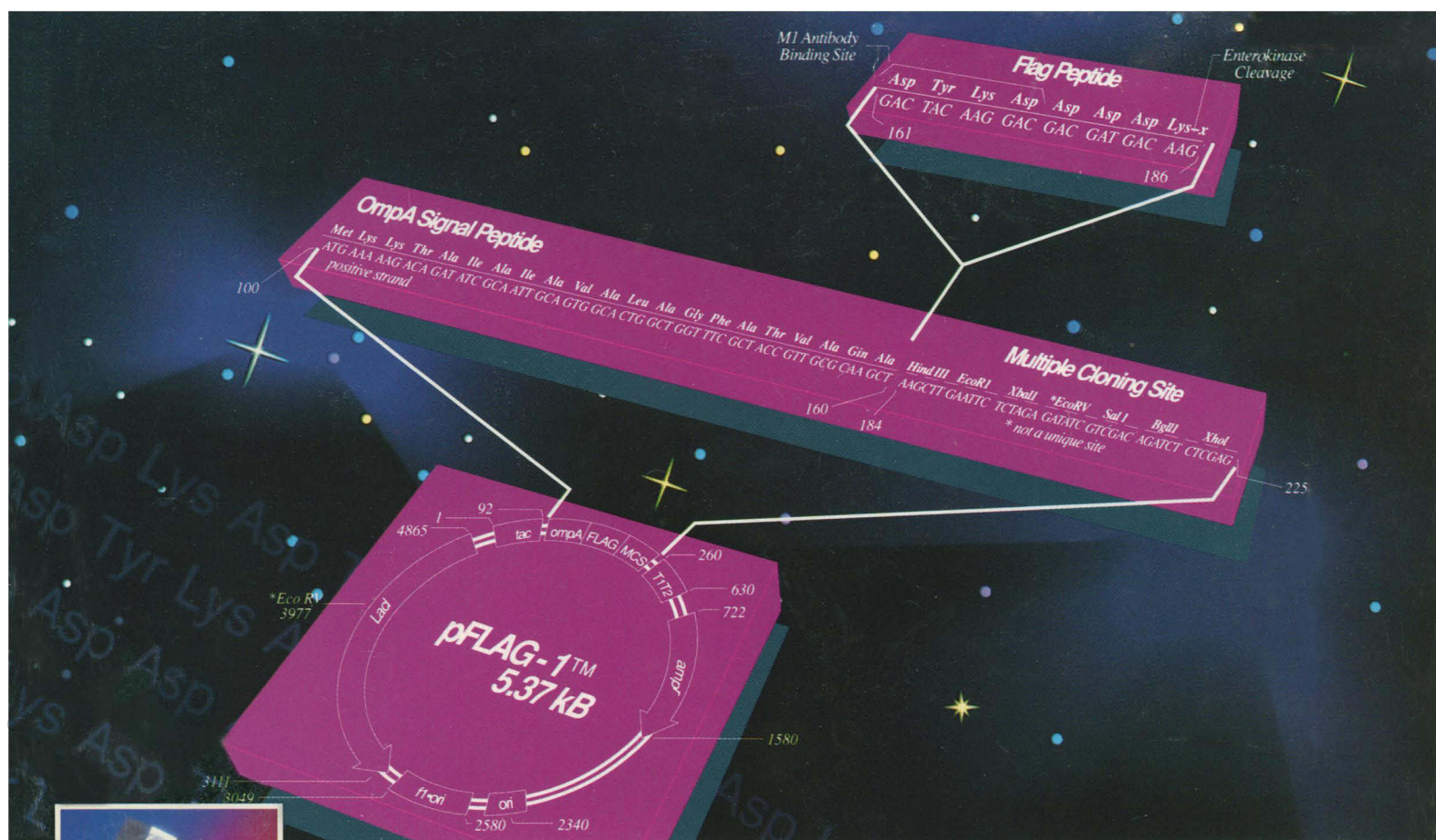
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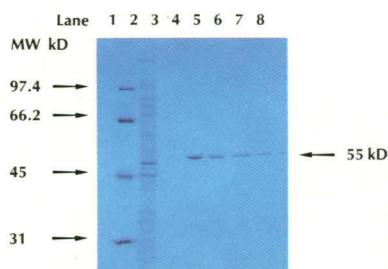
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