

Direct fluorescence in situ hybridization with a PNA 18-mer probe (Flu- $(C_3TA_2)_3$) for the telomere repeats on metaphase chromosomes from cultured human fetal cells. Chromosomes were counterstained with propidium iodide.

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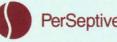
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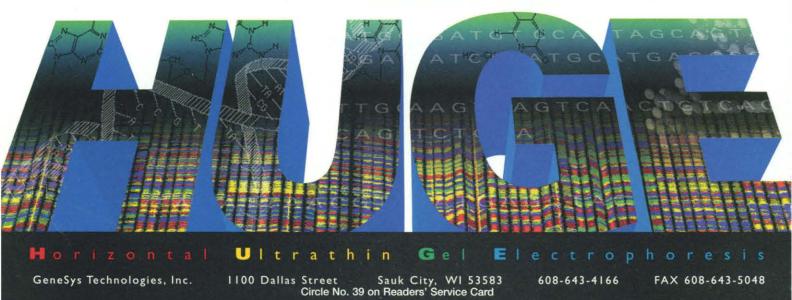
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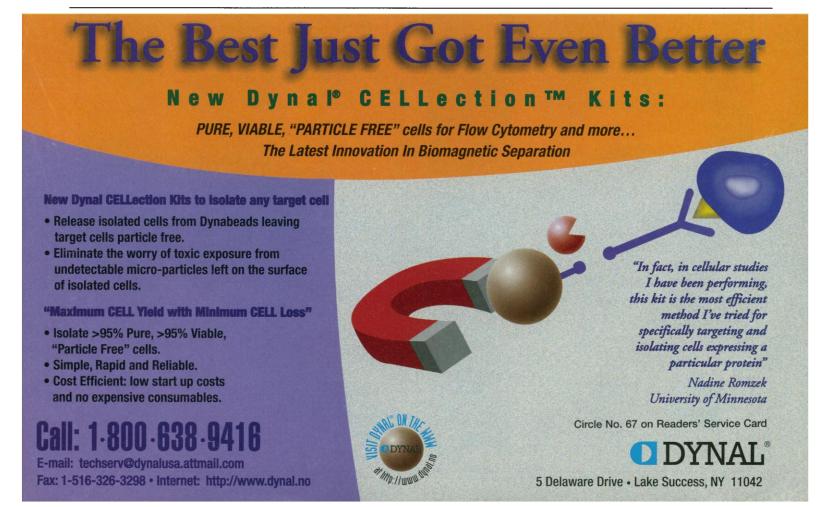
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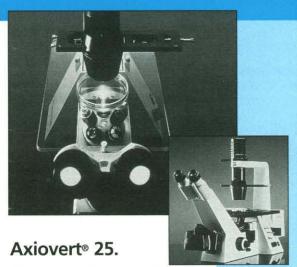
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(continued on page 1149)



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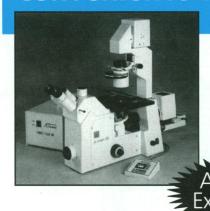
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(continued from page 1147)

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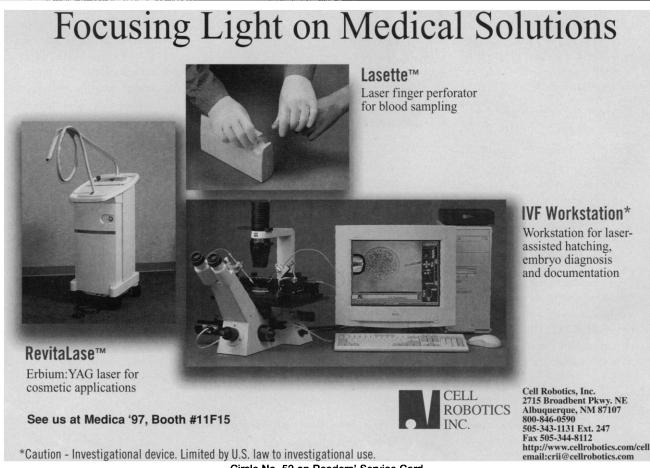
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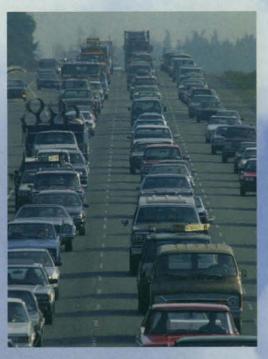
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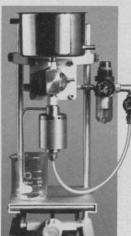
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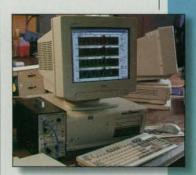
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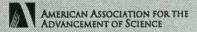
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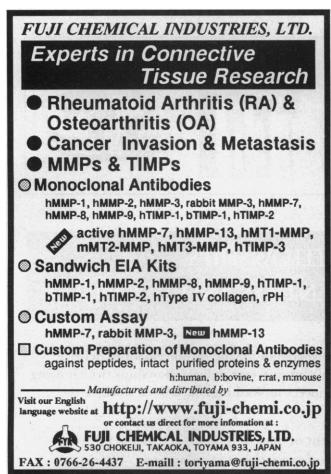


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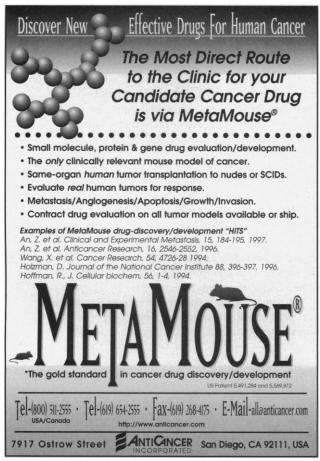
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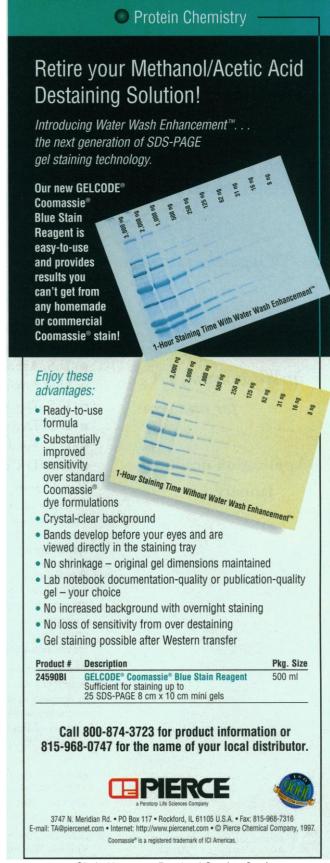
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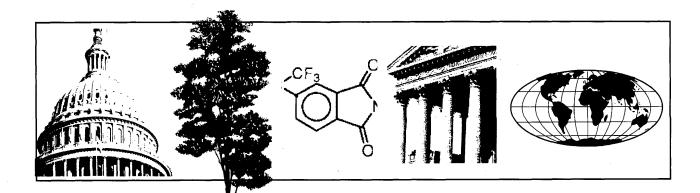




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Columbia University is transforming its historic Henry Krumb School of Mines into a center for excellence in education and research in environmentally and economically sound technologies for identifying, extracting, pro-cessing, and using earth resources including minerals, en-ergy, and water. We seek a highly qualified candidate who has attained the highest level of academic accomplishment and will be the first Department Chair of a worldleading program that prepares engineers for the challenges of the twenty-first century. Candidates should have a record of leadership and ability to develop intellectually rich and relevant research programs. Candidates should come from an engineering/applied science background and have experience in at least some of the following areas: technologies to address past and avoid future environmental disturbances; process and product design to minimize resource use and waste generation; engineering analysis of the relationships of material and energy flows at different geographic scales; resource recovery from unconventional sources and waste materials; analytic modeling of environmental impacts from industrial activities at different scales. The distinguished history and strong endowment of the department provide a unique opportunity to develop a new and innovative research and educatíonal agenda. This program is affiliated with Columbia Earth Institute, a major university-wide undertaking that includes among its member units the Lamont-Doherty Earth Observatory.

Please send résumé to: Professor N. J. Themelis, Department of Earth and Environmental Engineering, Columbia University, Mail Code 4711, 500 West 120th Street, New York, NY 10027. E-mail: njtl@columbia.edu.

Applications should be submitted before December 31, 1997. Columbia University is an Equal Opportunity/Affirmative Action Employer.

Lady Davis Institute for Medical Research/McGill University. A FACULTY POSITION is available for an enthusiastic outstanding candidate who will work as part of a productive team interested in various aspects of cellular iron metabolism. Qualified applicants should have at least three years of postdoctoral research experience in areas related to iron metabolism, and should possess molecular biology skills. Preference will be given to candidates with demonstrated research ability based upon prior publication record and to applicants having strong written communication skills. The successful candidate will be expected to obtain extramural support for research. Please send brief statement of research interests, capabilities, goals, curriculum vitae, and three letters of reference to: Dr. Samuel O. Freedman, Director of Research, Lady Davis Institute for Medical Research, Sir Mortimer B. Davis-Jewish General Hospital, 3755 Cote Ste-Catherine Road, Montreal, Quebec H3T 1E2 Canada. In accordance with Canadian Immigration regulations, this advertisement is directed in the first instance to Canadian citizens or permanent residents. Nonetheless, anyone interested is encouraged to apply.

TECHNICAL DIRECTOR MORPHOLOGY CORE THE UNIVERSITY OF PENNSYLVANIA

Molecular Biologist or Immunologist to support investigators in digestive, liver, and renal research; manage Core operations and development; assist in developing protocols for new antibodies and in situ hybridization; perform independent and collaborative research pertinent to Core; instruct in use of imaging system for light and fluorescent microscopy; supervise tissue processing and cutting; collect tissue for DNA, RNA, and protein bank. Applicants should have extensive experience in above techniques. Qualifications: M.S. or Ph.D. in related field plus three to four or two to three years of experience respectively; confocal experience desirable; ability to work independently, motivate others; organizational, writing, and computer skills necessary. Send curriculum vitae to: Dr. Debra Silberg, University of Pennsylvania, 600 CRB, Philadelphia, PA 19104-6144. FAX: 215-573-2024; e-mail: silberg@mail.med.upenn.edu. University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer encouraging women and minorities to apply.

Director, William R. Wiley Environmental Molecular Sciences Laboratory

Pacific Northwest National Laboratory (PNNL) is seeking an outstanding scientific leader to serve as Director of the William R. Wiley Environmental Molecular Sciences Laboratory (EMSL). This recently completed facility, the newest of the Department of Energy's (DOE) national scientific user facilities, is home to unique capabilities in magnetic resonance spectroscopy, mass spectroscopy, and computational chemistry and molecular modeling, along with a wealth of advanced instrumentation for characterizing the structure and chemistry of environmental materials and interfaces.

The EMSL is designed to provide the scientific community with the resources required to obtain a molecular-level understanding of the physical, chemical, and biological processes critical to DOE's environmental mission. EMSL staff and collaborators undertake fundamental, multidisciplinary research programs involving chemical, biological, materials, geological and computational sciences, designed to provide the new knowledge required to solve the nation's most complex environmental problems. EMSL research facilities are also available to outside users for other scientific work on a competitive basis.

The EMSL Director is responsible for developing the Laboratory as a collaborative research facility that attracts and supports a productive user community. The Director is also responsible for the continued development of core research programs and facility staff that will yield the scientific foundation for DOE's environmental mission.

Candidates should have a Ph.D. in Chemistry, Physics, Materials Science, or related science and an outstanding record of accomplishments in research. Candidates should also have significant experience in managing complex, multidisciplinary research projects, senior scientific staff, and significant laboratory facilities. We are particularly seeking candidates who combine a passion for first-class science with the desire to make a major impact on our most pressing environmental challenges. We also seek individuals who have demonstrated enthusiasm and capacity for developing scientific talent.

The Pacific Northwest National Laboratory is one of nine U.S. Department of Energy multi-program research laboratories. It is operated for DOE by Battelle Memorial Institute. PNNL is located in southeastern Washington State in the city of Richland. Richland's location on the banks of the Columbia River between the Cascade and Blue mountains combines the advantages of small-town living with a wide variety of outdoor recreational opportunities.

PNNL will be accepting applications for this position until, January 1, 1998. For confidential consideration, interested individuals should reference as #10-2028-063-LNM and send a scannable resume or curriculum vitae to: Pacific Northwest National Laboratory, P.O. Box 999, MSIN K1-24, Richland, WA 99352, e-mail to: pnl_open_positions@pnl.gov or fax to (509) 375-2276. Pacific Northwest National Laboratory is an Affirmative Action/Equal Opportunity Employer and supports diversity in the workplace. Minorities, women, Vietnam-era veterans, and the disabled are encouraged to apply.



SCHOLARS

Biomedical Research

The University of Texas Southwestern Medical Center

<u>UT Southwestern</u> is pleased to announce a new Endowed Program for Scholars in Biomedical Research. The Program, which is fully funded from private endowment, will provide \$600,000 over four years to support the research activities of each new <u>Assistant Professor</u> (tenure track) appointed to the Program; five will be appointed annually. In addition, regular funding for salary, as well as research space, will be provided by the medical school department or research center offering the appointment. Positions in both <u>basic science</u> and <u>clinical departments</u> are available. The goal of the program is to assure a successful beginning of the research careers of an ever-growing cadre of outstanding young investigators at UT Southwestern.

For detailed information about currently available faculty positions, please access our web page: http://www.swmed.edu

Or contact
John Perkins, Ph.D.
Endowed Biomedical Scholars Program
UT Southwestern Medical Center
5323 Harry Hines Boulevard
Dallas, Texas 75235-9004
Telephone: (214) 648-2174
FAX: (214) 648-2102

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Northeastern Ohio Universities College of Medicine

Assistant Professor, Human Microscopic Anatomy 🖿

Applications are being accepted for a TENURE TRACK faculty position in Human Microscopic Anatomy in the Department of Anatomy, Northeastern Ohio Universities College of Medicine (NEOUCOM). Proposed starting date for the position is July 1, 1998. A strong independent research program with a demonstrated ability to attract external funding is essential. Experience in teaching Microscopic Anatomy is desirable. Area of research focus is open, but applications from candidates working in the area of developmental biology, as it relates to neuromuscular and cell matrix interactions and musculoskeletal biology, are especially welcome. Teaching responsibilities involve participation in a team-taught, 14-week Microscopic Anatomy Course for first-year medical students. Salary, start-up support, and facilities for research are competitive.

NEOUCOM, in consortium with Kent State University, The University of Akron, Youngstown State University, and eight major teaching hospitals, offers a combined B.S./M.D. Degree. Basic medical science faculty participate in graduate programs leading to the Ph.D. in collaboration with the School of Biomedical Sciences at Kent State University. Graduate training opportunities in Biomedical Engineering are also available in collaboration with the Institute for Biomedical Engineering Research at The University of Akron.

Applicants are requested to forward their curriculum vitae, a statement of research interests, and the names of at least three references by January 15, 1998, to: Dr. Steve Ward, Chair, Microscopic Anatomy Search Committee, c/o Department of Human Resources, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, Ohio 44272-0095. We

take affirmative action toward equal employment opportunity.





The NCI Cooperative Human Tissue Network (CHTN) provides normal, benign, pre-cancerous and cancerous human tissue to the scientific community for basic and developmental studies in many areas of cancer research. Contact the CHTN website at: http://www.icic.nci.nih.gov/chtn/chtnmain.html, or Ms. Marianna Bledsoe, NCI, (301) 496-7147; e-mail: mb80s@nih.gov.

The NCI AIDS
Malignancy Bank
(AMP) is a callectic

(AMB) is a collection of tissue and biological fluids with associated clinical and follow-up data from patients with HIV-related malignancies. The specimens and clinical data are available for research studies, particularly those that translate basic research findings to clinical application. Contact the AMB website at: http://www.icic.nci.nih.gov/amb/amb.html, or Dr. Ellen Feigal, NCI, (301) 496-2522; e-mail: ef30d@nih.gov.



The Cooperative Family Registry for **Breast Cancer Studies** (CFRBCS) provides biological specimens with associated family history, clinical, demographic and epidemiologic data from participants with a family history of breast cancer, breast/ovarian cancer, or Li-Fraumeni syndrome, and their relatives. The CFRBCS's repository is particularly suited to support interdisciplinary and translational breast cancer research. Contact the CFRBCS website at: http:// www-dceg.ims.nci.nih.gov/ cfrbcs, or Dr. Daniela Seminara, NCI, (301) 496-9600; e-mail: seminard @epndce.nci.nih.gov.

The NCI Cooperative **Breast Cancer Tissue** Resource (CBCTR) can provide researchers with access to approximately 8,000 cases of formalin-fixed, paraffinembedded primary breast cancer tissue, with associated pathology and clinical data. The collection is particularly well-suited for validation studies of diagnostic and prognostic markers. Contact CBCTR's World Wide Web site at: http://www-cbctr.ims.nci. nih.gov, or Ms. Sherrill Long, Information Management

Services, Inc., (301) 680-9770;

e-mail: sherrill@ims.nci.nih.gov.

The Gynecologic Oncology Group (GOG) Tissue Bank can provide malignant, benign, and normal ovarian, and cervical tissue with associated clinical information. The bank was established to provide carefully preserved specimens needed for molecular biology studies of gynecologic tumors. Contact the GOG Tissue Bank, Children's Hospital, Columbus, OH, (614) 722-2890.

Additional information on breast cancer tissue resources may be found on the NCI-NAPBC Breast Cancer Specimen and Data Information System on the World Wide Web (http://cancernet.nci.nih.gov/breastdata).

Other human tissue resources for cancer research may be available through collaborative arrangements. For further information, please contact Ms. Marianna Bledsoe, NCI, (301) 496-7147, e-mail: mb80s@nih.gov.

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Pfizer scientists are involved in some of the most critical research in the world today. As the company recently voted by Fortune Magazine as the most admired in the pharmaceutical industry, we have established a product pipeline that is unparalleled, and an intellectual, collaborative environment that inspires scientific achievement. Join us and become a part of the cure.

become a part of the cure.

Pfizer Inc's Animal Health
Discovery Department is currently seeking candidates
for the following positions.

We are also seeking
future candidates for
additional posts
expected to
be available
next year.

- We seek a protein biochemist to join a multi-disciplinary team with expertise in protein purification to support animal health vaccine discovery. The qualified candidate will have an MS degree in Biochemistry or related field plus 2 years of experience, or the equivalent, in the purification of native and recombinant proteins. Laboratory experience using/developing purification methods; experience with various chromatography systems (BioCad, AKTA, HPLC, etc.); experience with routine laboratory analytical techniques necessary for protein characterization; and a strong working knowledge of protein biochemistry are required. Job Code: 2286
 - There are two openings on the research team responsible for the discovery and evaluation of new therapies for companion animals. As a member of the team, you would be conducting in vitro and/or in vivo assays related to a range of therapeutic areas; particularly metabolic disease, age-related frailty and obesity. For suitably qualified applicants, other duties might include the coordination of animal studies at off-site research facilities with leading veterinary researchers. Qualifications for these positions are a Master's degree or equivalent education in a biological discipline. Experience in either cell culture coupled with basic biochemical/pharmacological techniques, or in assay procedures involving laboratory animals is desirable. Job Code: 2287
 - Additionally, we want an individual to join the research team responsible for the discovery and evaluation of agents which improve livestock performance. The duties for this position include development of assays and undertaking validation studies for new performance targets, design of experimental protocols, testing of compounds using in vitro and in vivo assays, data analysis and presentation of the results. The individual must have an MS or equivalent in molecular biology, or related field. Three or more years of research experience in an academic or industrial setting is desirable. Experience in molecular biology and endocrinology including RNA and DNA isolation, PCR, plasmid construction, mammalian cell transformation and receptor binding assays will be an advantage. Job Code: 2288

Pfizer has a fast-paced, collegial environment, offering very competitive salaries and excellent benefits including relocation assistance. For confidential consideration, please forward resume to: Employee Resources, Pfizer Inc, Job Code #
Central Research Division, Eastern Point Road, Groton, CT 06340. For more information about Pfizer, see us on the Internet at: http://www.pfizer.com. We are an equal opportunity employer M/F/D/V.



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CHIRON CORPORATION's mission is to end human suffering caused by disease through the development of products that transform the practice of medicine. Since 1981, Chiron has been at the forefront of biotechnology, using genetic engineering and other tools to develop products for the diagnosis, prevention and treatment of human disease. Currently we seek the following professionals to join our team in St. Louis.

CELL CULTURE MANAGER

Requires advanced degree in Cell Biology or related scientific discipline and at least 7 years' experience in a pharmaceutical environment with large scale cGMP manufacturing. Minimum of 5 years' supervisory experience required. Candidate will manage a group of highly-skilled cell culture specialists and technicians responsible for pre-culture and large-scale bioreactor operations. Must be experienced and knowledgeable with cGMP requirements, validation, and employee training and development. Must be well organized and have excellent communication and leadership skills.

PRODUCTION SUPPORT MANAGER

Responsible for managing production support employees responsible for facility cleaning, equipment cleaning and preparation. Requires a BS degree in the science or engineering field plus a minimum of 7 years' experience in a pharmaceutical environment with large-scale cGMP manufacturing. Minimum of 4 years' supervisory experience and extensive knowledge of cGMPs requirements. Experience in equipment cleaning validation, design, testing and maintenance is highly preferred. Position requires strong communication, organizational, and computer skills.

MICROBIOLOGY SUPERVISOR

Manage day to day activities of the Microbiology lab. Position includes performing all required testing, assuring compliance with all test procedures, reviewing all data, maintaining environmental monitoring database, coordinating testing and data requirements with all manufacturing groups, and performing assay validations. Candidate should have a minimum of a BA/BS in the science field with a minimum of 5-6 years' experience in microbiology with supervisory experience, including 4 years in a cGMP controlled environment. Experience in environmental monitoring and microbial identification is required and experience in biotech or pharmaceutical industry is highly preferred.

QUALITY ASSURANCE MANAGER

Create, revise, and maintain Quality Assurance systems to assure products meet requirements for clinical and commercial cGMPs with direct participation in the development and implementation of standards, methods and procedures for inspection and release of intermediates. Will mange and perform document review to assure manufacturing according to written procedures and specifications. Requires a BA/BS in a science discipline with a minimum of 8 years' experience in Quality Assurance with management experience. Experience in QA documentation review is required. Experience in biotech or pharmaceutical industry is highly preferred.

Chiron offers an outstanding compensation and benefits package. Send your resume to: Chiron Corporation, Human Resource Manager, 4766 LaGuardia Dr., St. Louis, MO 63134. FAX: 314-426-1795. We are an equal opportunity employer.

FACULTY POSITION

CELLULAR BIOCHEMISTRY & BIOPHYSICS PROGRAM SLOAN-KETTERING INSTITUTE

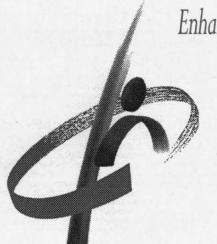
The Cellular Biochemistry & Biophysics Program at the Sloan-Kettering Institute of the Memorial Sloan-Kettering Cancer Center seeks candidates for a tenure-track faculty position at the Assistant Member level in the general area of cell biology. The Program faculty includes cell biologists, biochemists and structural biologists with interests in diverse areas of biology such as intracellular protein transport, cell adhesion, signaling pathways, cell cycle regulation, and nucleic acid structure and function. The Sloan-Kettering Institute offers a highly interactive research environment, with groups working in the areas of molecular biology, developmental biology, cell biology and structural biology. Please submit a curriculum vitae, a brief research statement (including present and future research activities), and a list of at least three references by December 1, 1997. Prospective candidates should send applications to: Barry M. Gumbiner, PhD, Member, Cellular Biochemistry & Biophysics Program, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 564, New York, NY 10021. EOE/AA.



Memorial Sloan-Kettering Cancer Center

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Enhancing lives through oncology innovations

Hoechst Marion Roussel, a world leader in pharmaceuticalbased healthcare, is dedicated to extending and enhancing human life through discovery, development and manufacture of innovative products. Additional dedicated resources have created the following opportunities within our expanding Oncology Disease Group at our U.S. Strategic Research Center in Bridgewater, NJ:

Sr. Signal Transduction Scientist

We are seeking a group leader within our Oncology Disease Group for originating Signal Transduction research projects and overseeing the daily performance of the people working on these projects.

Requirements:

Ph.D. in Cell Biology, Molecular Biology, Biochemistry or recognized equivalent
Minimum 4 years pharmaceutical industry experience (beyond post-doc), including managerial and supervisory background
Experience in either signal transduction targets such as AP-1, JUN, FOS, MAPK pathways, transcription factors or retinoblastoma protein, p53, and other cell cycle targets
• Significant record of scientific publication

Excellent written and verbal communication skills

Sr. Tumor Research Biologist

We are seeking a group leader for our Tumor Biology Group. This individual will be responsible for, in collaboration with the Head of Disease Group Oncology, determining the strategy for efficient drug testing and assessment of drug effects in tumor models. Requirements:

 Ph.D. or DVM/Ph.D. in Pharmacology, Pathology or recognized equivalent field
 Minimum of 8 years experience (industry experience preferred) in tumor model use for drug testing, including experience with human tumor xenografts in nude and scid mice, working knowledge of and hands-on experience in tumor pathology, immunohistochemistry, and in situ hybridization

Experience with in vivo models of angiogenesis, tumor model development, and tumor cell culture is highly desirable
 Published record of accomplishment in drug testing and development

· Excellent verbal and written communication skills

Cell/Molecular Biologists

These individuals, in collaboration with Sr. Oncology Associates, will be responsible for assisting in the design of and performing experiments in cell cycle, signal transduction, and angiogenesis research.

MS (or BS with a minimum of four years experience) in Biology or recognized relevant disciplines
 Experience in molecular biology (Northern and Southern blotting, cloning, recombinant DNA techniques and functional expression), biochemical techniques (Western blotting, enzyme assays and protein electrophoresis), and/or cell biology

Experience with baculovirus expression technology is preferred
 Specific expertise in signal transduction or cell cycle is desirable

Angiogenesis Researcher

selected individual will be responsible for compound evaluation for angiogenesis projects, including developing primary and secondary assays, running secondary assays on compounds identified in angiogenesis screens, and compiling and reporting results to group members.

Requirements:

MS in Cell Biology or Molecular Biology

Minimum 5 years of experience in compound testing including experience with cell-based and cell-free assays

· Competency in the area of cell culture · Background in angiogenesis highly desirable

Attracting and retaining top talent is a high priority at Hoechst Marion Roussel. That is why we offer one of the most outstanding and comprehensive compensation and benefits packages in the pharmaceutical industry. Our total rewards package includes competitive compensation and bonus programs, flexible medical and dental plans, tuition assistance, income protection plans, and generous retirement plans that have been cited as the best in the industry. In addition, our relocation package is second to none in addressing the transitional needs of our associates. For consideration, please mail your resume (suitable for scanning) including salary history/requirements, indicating position of interest, to: Staffing Manager, D103-H, Ref# 1997BW0021, Hoechst Marion Roussel, Routes 202-206, P.O. Box 6800, Bridgewater, New Jersey 08807-0800, U.S.A., or e-mail: jobs@hmri.com. For additional company information, we invite you to visit our website: www.hmri.com. An affirmative action employer M/F/D/V.

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Endowed Chair in Human Genetics Research

The Fox Chase Cancer Center (FCCC) is seeking a tenure-track investigator with peer-reviewed funded genetic research of acknowledged excellence relevant to cancer in humans. The specific interest could include genetic basis of complex traits, studies in gene-environment interaction or translational research. The investigator's program may be bench-based research that uses or extends human genome project resources, bioinformatics and/or computational genetics as well as traditional molecular biologic studies in human gene discovery. As a leader for the Human Genetic Research Program, he/she will be expected to have a strategic vision of the program; chair the Human Genetics Search Committee; mentor junior investigators; present the program to potential donors, and explore industrial partnerships.

FCCC has made a substantial commitment to this program including construction of a Cancer Prevention Pavilion with 16 new laboratories and resources to hire additional investigators in human genetics.

Application should be addressed to:

Paul F. Engstrom, M.D. Fox Chase Cancer Center 7701 Burholme Avenue Philadelphia, PA 19111

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Breakthrough... OPPORTUNITIES

GelTex Pharmaceuticals, Inc., an emerging pharmaceuticals, inc., an emerging pharmaceutical company developing novel polymer technology for therapeutic applica-tions, is seeking experienced professionals for the following positions:

Sr. Scientist, Microbiologist
We are seeking a candidate with a Ph.D. in Microbiology and at least
2-4 years experience in the development of high-throughput antimicrobial
assays to join our expanded Infectious Disease Program. A strong
background in microbial assay development, innovative work relating to
antimicrobial mechanisms, and experience with microbial toxins are
desirable. The candidate's primary responsibility will be to establish
expanded testing of candidate drugs against a panel of clinically relevant
bacterial pathogens. Additional responsibilities include the development
of models to study mechanisms of antimicrobial action. The successful
candidate will work as part of a multi-disciplinary team to discover novel candidate will work as part of a multi-disciplinary team to discover novel antimicrobial compounds. Please refer to: job code JK002.

Sr. Scientist, Cell Biologist

We are seeking a candidate with a Ph.D. in Cell Biology, Molecular Biology, or Microbial Physiology to join a new multi-disciplinary team discovering novel antimicrobial compounds. Three to five years experience in pathogen/host interactions, cell surface physiology, ion channels, membrane lipids, or membrane-targeting agents is desirable. The candidate will be responsible for determining the membrane interactive properties of novel antimicrobial compounds and the design and execution of studies to determine the relationships between pathogen surfaces and drug activity. Plase respond to: job code JK001

In addition to these technical skills and experience, the ideal candidate will appreci-The data of the variable team approach, and desire to work in an entrepreneurial environment. Send resume to: Human Resources, GelTex Pharmaceuticals, Inc., Nine Fourth Avenue, Waltham, MA 02154. GelTex is an equal opportunity employer.



Postodoctoral Fellowships in Complex Systems Studies at the Santa Fe Institute

The Santa Fe Institute expects to have an opening for one or more Postdoctoral Fellows beginning in September 1998.

The Institute's multidisciplinary research program is devoted to the study of complex systems, especially complex adaptive systems. Topics currently under study include nonlinear dynamics and pattern formation; measures of complexity; learning algorithms; agent-based modeling and simulation tools; evolutionary biology; models of the immune systems, cellular regulation, and other biological systems; models of economic, political, and social interactions; and others. Postdoctoral Fellows work either on existing research projects or on projects of their own choosing.

Candidates should have a Ph.D. (or expect to receive one before September 1998) in the mathematical, computational, biological, or social sciences, with an academic record of scientific excellence, a demonstrated ability for independent research, and a strong interest in interdisciplinary approaches

Special consideration will be given to those applicants who propose, as an integral part of their research at SFI, a specific project involving experimental work or data collection at locations other than SFI. Candidates with such interests are requested to submit an outline of the proposed offsite project, along with along with a supporting letter from the organization through which the experiments or data collection is to be coordinated.

Although their primary research site will be SFI, successful candidates in this category will receive salary and travel expenses from SFI in support of offsite research. Applicants should submit a curriculum vitae, list of publications, and statement of research interests, and arrange for three letters of recommendation. Incomplete applications will not be considered.

Non-U.S. applicants are eligible to apply. Successful foreign applicants would enter the U.S. in either J or, less likely, an H visa.

All application materials must be received by February 20, 1998. Decisions will be made by April 1998. Send application materials to: Postdoctoral Committee, Santa Fe Institute, 1399 Hyde Park Road, Santa Fe, NM 87501. Send complete application packages only, preferably by postal mail, to the above address. Include your e-mail address and/or fax number. SFI is an Equal Opportunity Employer.

LOS ALAMOS NATIONAL LABORATORY

Biochem Lab Tech

The chosen candidate will work as a technician in Life Sciences Division as a member of our new "Protein Expression, Purification, and Crystallization Resource." Particular emphasis will be on high-throughput recombinant protein production for structural studies. The successful applicant will work closely with structural biologists for production of proteins for multiple research teams. Other responsibilities include operating the resource, training staff in using developed methods, and coordination of activities with other scientists. Will also be required to work in a highly cooperative, interdisciplinary research environment.

Extensive experience in protein purification is essential. Must have the competency to develop new protein purification procedures and to operate various purification instruments including FPLC and HPLC, as well as the ability to work within a team. Experience in biophysical and structural analysis of protein, protein/nucleic acid complexes, crystallization, and protein expression is desirable. Must have a Bachelor's in Physical or Life Sciences or equivalent combination of education and experience. A Master's in Biochemistry and/or five years of experience in protein biochemistry or equivalent are desired.

Please send your resume with Job Reference #Science982891 clearly stated at top and three letters of reference to:

jobs@lanl.gov (no attachments, please)

or mail to:

Human Resources Job Reference #Science982891 **Los Alamos National Laboratory**

Los Alamos, NM 87545 TDD: (505) 665-5357



ASSOCIATE DIRECTOR BEHAVIORAL AND SOCIAL RESEARCH PROGRAM National Institute on Aging

THE POSITION: Associate Director (AD) for the Behavioral and Social Research (BSR) Program, National Institute on Aging (NIA), one of the world's largest and most comprehensive institutions in aging research. NIA conducts, fosters, and supports biomedical, social, and behavioral research and training pertaining to aging processes and common problems and needs of the aged. The AD, BSR, serves as the principal advisor to the Director, NIA, in the area of behavioral and social sciences, and oversees the BSR program as well as collaborates with other NIA program activities. The AD plans and directs extramural and collaborative research and training at university medical centers and other behavioral and social research institutions throughout the United States. The AD administers the issuance of National Research Service Awards to individuals and grants to institutions with relation to training in aging; and collects and disseminates information on research and findings in the area of aging.

THE CHALLENGE: Provide leadership in the overall scientific administration of an innovative research program in the fields of behavioral and social research with a Fiscal Year 97 budget of \$67 million. Support a broad spectrum of research and training aimed at a better understanding of behavioral and social aspects of aging. Evaluate the Program's needs in relation to the mission of NIA as well as exploring new dimensions in the field of research and training. Expand knowledge in the areas of behavioral and social aging and guide the NIA's multi-disciplinary approach to collaborating and disseminating information to Federal agencies, the public, and at the international level.

THE IDEAL CANDIDATE: Demonstrated scientific leadership and management of a basic behavioral and/or social research program of national and international standing. M.D. or Ph.D. or comparable experience and training in one of the behavioral, social, and/or biomedical sciences. Must have research experience in an area of behavioral and/or social research which meets the following requirements.

1. Knowledge and ability to lead a scientific program of national and international scope in behavioral and social research which includes managing a large, multi-disciplinary research program. Experience developing and implementing new or restructured behavioral and social research programs to meet national and international health and research needs. Experience designing policies for the initiation and execution of multi-disciplinary research and determining the productivity and effectiveness of current research.

2. Ability to provide leadership and broad vision to a large research program with extensive managerial and executive level responsibilities (i.e. training, research resources, strategic planning, budgeting, and human resource management) in a diverse organization. Experience in managing and directing a large scale, multi-disciplinary scientific research program, with responsibility for recruiting, retaining, and rewarding a highly capable, culturally diverse work force; and for developing and executing organizational, budgetary, and human resource plans.

SALARY RANGE: This is a Civil Service position in the Senior Executive Services (SES), with a salary ranging from an ES-1 to ES-6 level per annum (currently \$103,897 to \$123,100). Physicians may be eligible for an annual comparability allowance up of to \$20,000. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal candidate, subject to individual approval; a relocation bonus of up to 25 percent of base pay may be available to a permanent Federal employee who must relocate, subject to individual approval.

HOW TO APPLY: Applicants are required to submit a bibliography and either a curriculum vitae, Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), resume, or any other written format which addresses the requirements indicated in this announcement. Application materials must be sent to the following address:

NATIONAL INSTITUTE ON AGING Building 31, Room 2C02 31 Center Drive, MSC 2292 Bethesda, MD 20892-2292 Attn: Holly Watkins, OR E-mail: WatkinsH@exmur.nia.nih



Applications must be postmarked by December 10, 1997 and received by close of business December 17, 1997.

All application forms are subject to the provisions of the Privacy Act and become the property of the DHHS.

For further information contact Ms. Holly Watkins in the NIA Personnel Office at (301) 496-5347, or e-mail address: WatkinsH@exmur.nia.nih. To receive a faxed copy of the vacancy announcement, call (301) 594-2953 or (800) 728-5627, fax ID 1205.

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Department of Molecular Physiology & Biological Physics

University of Virginia Health Sciences Center

P.O. Box 10011

Charlottesville, VA 22906-0011

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 Cell Signaling

Postdoctoral Researcher

Responsible for investigating mechanism of cadmium-induced bone resorption in cell culture and mouse model. Requires Ph.D. in biochemistry, cell biology, molecular biology, or related field. Knowledge of cell culture and molecular biology techniques required and bone cell biology desirable. Applicants must have received Ph.D. within three years of appointment. Competitive salary, commensurate with background and experience. Interested individuals should send curriculum vitae, brief description of research experience, and names and addresses of three references to: Susan Walker, Employment and Placement, Box CMB-121130-43, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Fax: 630-252-3441. For additional information, please refer to Argonne's Home Page on the

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RICE UNIVERSITY DEAN OF WIESS SCHOOL OF NATURAL SCIENCES

Rice University invites applications and nominations for the position of Dean of the Wiess School of Natural Sciences. Reporting to the Provost, the Dean is responsible for academic, fiscal, and personnel matters. The Dean is expected to provide leadership for the school and to foster excellence in teaching, research, and service to the community as well as in the creation of innovative interdisciplinary programs. The Dean will have the opportunity and expectation to continue an active research program. The Dean also represents the School of Natural Sciences to external agencies and constituencies and actively participates in the University's fundraising initiatives.

Rice University is an independent, coeducational, nonsectarian, private university dedicated to undergraduate and graduate education, research, and professional training in selected disciplines. Located in Houston, Texas, Rice has an undergraduate student population of 2,600, a graduate and professional student population of 1,500 and a full-time faculty of 450. Established in 1891, the University has an operating budget of approximately \$235 million and an endowment of \$2.3 billion. The Wiess School of Natural Sciences consists of 7 departments with 110 full-time faculty members.

Applicants must have a distinguished record of scholarship and teaching commensurate with a tenured appointment at Rice University. Women and minorities are encouraged to apply. Salary is commensurate with experience and qualifications. Review of applications will begin by November 30, 1997.

To apply, please send a letter discussing your qualifications, along with a current résumé and the names, addresses, and telephone numbers of five references to: Search Committee for the Dean of Natural Sciences

Dr. Fred Rudolph, Chair, Office of the Provost, Mail Stop - 2, Rice University, 6100 Main Street, Houston, TX 77005-1892



All inquiries will be maintained confidentially. To nominate another person, please send a letter discussing their qualifications and providing contact information for the nominee.

Rice University is an Equal Opportunity/Affirmative Action Employer.

For more information on Rice Natural Sciences see http://www.ruf.rice.edu/~nsci/

BIOLOGICAL SCIENCES CHAIRPERSON

The Dyson College of Arts and Sciences at Pace University is seeking a dynamic teacher-scholar with proven abilities in research and grantsmanship to Chair its Department of Biological Sciences on the Pleasantville campus in Westchester County (thirty-five miles north of New York City). Candidates must possess strong interpersonal and organizational skills as well as leadership credentials. A Ph.D. in Cell/Molecular Biology plus college teaching and administrative experience are required. Competence in tissue culture is desirable. Rank and salary are dependent on qualifications.

A letter of application, curriculum vitae and 3 letters of recommendation, personal statement regarding teaching and administration should be sent to: Office of the Dean, The Dyson College of Arts and Sciences, Pace University, 861 Bedford Road, Pleasantville, New York 10570.

EEO/AA. Pace University is committed to a diverse learning and work environment. Women and minorities are encouraged to apply.



AMERICAN ASSOCIATION FOR CANCER RESEARCH SCIENTIFIC CONFERENCES

DECEMBER 12-16, 1997

DNA Methylation, Imprinting, and the Epigenetics of Cancer

Chairpersons: Peter A. Jones, Los Angeles, CA; Stephen B. Baylin, Baltimore, MD; Timothy H. Bestor, New York, NY

El Conquistador Resort and Country Club, Las Croabas, PR

JANUARY 9-13, 1998

Molecular Mechanisms of Apoptosis Regulation

Chairpersons: John C. Reed, La Jolla, CA; Vishva M. Dixit, Ann Arbor, MI

Renaissance Esmeralda Resort, Indian Wells (Palm Springs), CA

JANUARY 24-28, 1998

Angiogenesis and Cancer

Chairpersons: Judah Folkman, Boston, MA; Michael Klagsbrun, Boston, MA Hyatt Orlando, Orlando, FL

FEBRUARY 16-21, 1998

Innovative Molecular Biology Approaches to the Prevention, Diagnosis, and Therapy of Cancer

Joint Meeting with the Japanese Cancer Association Chairpersons: Edward Bresnick, Worcester, MA; Kaoru Abe, Tokyo, Japan Maui Marriott Resort, Maui, HI

MARCH 28-APRIL 1, 1998

89th Annual Meeting

Chairperson: Frank J. Rauscher III, Philadelphia, PA Morial Convention Center, New Orleans, LA Abstract Deadline: October 28, 1997



JUNE 14-18, 1998

Proteases and Protease Inhibitors in Cancer

Co-Sponsored by the Danish Society for Pathology Chairpersons: Keld Dano, Copenhagen, Denmark; Henri Rochefort, Montpellier, France; Lynn M. Matrisian, Nashville, TN; Nils Brunner, Copenhagen, Denmark Nyborg Strand Conference Center, Nyborg, Denmark

SEPTEMBER 24-28, 1998

Viral Targets and Cellular Growth Control (tentative title)

Chairperson: Thea D. Tlsty, San Francisco, CA (additional chairpersons to be announced)
Marriott's Laguna Cliffs Resort, Dana Point, CA

OCTOBER 14-18, 1998

Gene Regulation and Cancer (10th Anniversary of the AACR Special Conferences)

Chairpersons: Phillip A. Sharp, Cambridge, MA, and Steven L. McKnight, Dallas, TX The Homestead, Hot Springs, VA

NOVEMBER 11-15, 1998

Endogenous Sources of Mutations

Chairpersons: Lawrence J. Marnett, Nashville, TN; James A. Swenberg, Chapel Hill, NC; Tomas A. Lindahl, Herts, England Sanibel Harbour Resort and Spa, Ft. Myers, FL

DECEMBER 2-6, 1998

Basic and Clinical Aspects of Prostate Cancer

Chairpersons to be announced Hyatt Grand Champions Resort, Indian Wells (Palm Springs), CA

AACR members will receive brochures on the above conferences as soon as they are available.

Nonmembers should call or write:

American Association for Cancer Research Public Ledger Building, Suite 826
150 South Independence Mall West Philadelphia, PA 19106-3483
215-440-9300 • 215-440-9313 (FAX) E-Mail: meetings@aacr.org

For regular updates to this list visit the AACR's Website, http://www.aacr.org

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Bio-Méga division recherche, Boehringer Ingelheim (Canada) Ltée est un chef de file dans le domaine de la recherche pharmaceutique au Canada. Pour appuyer nos efforts d'innovation en recherche, un poste de chimiste en modélisation moléculaire vous est offert.

Chimiste en modélisation moléculaire (M.Sc.)

Le candidat sélectionné travaillera en étroite collaboration avec une équipe multidisciplinaire composée de scientifiques œuvrant en chimie thérapeutique, en modélisation moléculaire, en spectroscopie RMN, en biochimie et en cristallographie par rayons X. Cette équipe est vouée au design, à l'optimisation et à l'étude structurale de nouveaux agents thérapeutiques. Le candidat recherché possède une maîtrise (M.Sc.) en chimie combinée avec de solides connaissances en modélisation moléculaire faisant appel à l'utilisation de méthodes de calculs en mécanique moléculaire et une expertise du système d'exploitation UNIX. Il est essentiel d'être un bon communicateur et de posséder des aptitudes manifestes en relations interpersonnelles.

Située à Laval, en banlieue de Montréal, Bio-Méga division recherche, Boehringer Ingelheim (Canada) Ltée offre une rémunération et des avantages sociaux des plus compétitifs ainsi que l'occasion de travailler dans un environnement agréable et intellectuellement stimulant.

Le candidat qualifié peut envoyer son curriculum vitæ à l'adresse suivante :

Service des ressources humaines Bio-Méga division recherche, Boehringer Ingelheim (Canada) Ltée 2100, rue Cunard Laval (Québec) H7S 2G5 Télécopieur : (514) 682-8434 Courriel : hrch@bio-mega.boehringer-ingelheim.ca

La forme masculine utilisée désigne autant les femmes que les hommes. Nous sommes engagés activement en matière d'équité dans l'emploi.

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Research Division of:

Boehringer Ingelheim (Canada) Ltd.

The Bio-Méga Research Division of Boehringer Ingelheim (Canada) Ltd. is one of Canada's leading pharmaceutical research centres. An opportunity exists for a qualified computational chemist to join our company in its quest for new and innovative pharmaceuticals.

Computational Chemist (M.Sc.)

The successful candidate will join a multidisciplinary research team (including a computational chemist, medicinal chemists, NMR spectroscopists, biochemists and X-ray crystallographers) devoted to structure-based drug design. The ideal candidate will possess an M.Sc. in Chemistry and have experience in applied molecular mechanics calculations. Preference will be given to candidates with expertise in modelling biological systems and experience with UNIX-based computer systems. Strong communication and interpersonal skills are essential.

The Bio-Méga Research Division of Boehringer Ingelheim (Canada) Ltd. is located in the Montreal suburb of Laval. We offer a competitive compensation and benefits package, in addition to the opportunity to work in a pleasant and intellectually stimulating environment.

Interested candidates should send their resume to:

Human Resources Department Bio-Méga Research Division Boehringer Ingelheim (Canada) Ltd. 2100 Cunard Street Laval, Quebec H7S 2G5

Fax: (514) 682-8434

E-mail: hrch@bio-mega.boehringer-ingelheim.ca

We are actively committed to employment equity.

Roche

SCIENTIFIC LEADERS

Innovative research and scientific investigation drive the success of Roche Vitamins Inc., a world leader in producing bulk vitamins and nutrients used by the food, pharmaceuticals, cosmetics, and animal feed industries. As we aggressively pursue new breakthroughs in Animal Health & Nutrition, at our new research center in Nutley, NJ, we're looking for 3 dedicated Scientists to lead, plan, and implement investigations in the following areas:

ANIMAL NUTRITION & HEALTH

Proven expertise in monogastic nutrition research, digestive cell biology, and physiology is required. (Dept. 97084)

MICROBIOLOGY & PARASITOLOGY

Advanced knowledge of microbial or parasitic genetics, physiology, and recombinant expression systems is essential. (Dept. 97085)

MOLECULAR GENETICS

Demonstrated proficiency in recombinant expression technologies and gene expression analysis is crucial. (Dept. 97086)

As a team leader in one of these areas, you will be expected to propose visionary solutions and to actively pursue innovative research. Leaders will interact with business units and regulatory professionals, recruit doctoral and research personnel, and coordinate R&D activities with Roche European counterparts and biotechnology center scientists. **ALL POSITIONS** require a Ph.D. in a related field with a minimum of 7 years post-doctoral research experience. Strong people management and communication skills are critical. Competency in French and/or German is desirable. International travel is expected.

We offer a competitive salary and progressive benefits package. To apply, please send your resume and salary requirements indicating appropriate dept. code to: Human Resources Department , Roche Vitamins Inc., 45 Waterview Blvd., Parsippany, New Jersey 07054-1298. We are an equal opportunity employer.



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POSTDOCTORAL POSITIONS VASCULAR MORPHOGENESIS

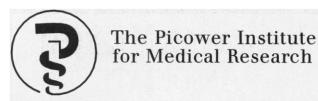
Postdoctoral positions are available to study molecular mechanisms of vascular system development (*PNAS*, <u>90</u>, p. 9355, 1993; *NATURE*, <u>376</u>, p. 70, 1995; *DEVELOP-MENT*, <u>121</u>, p. 1089, 1995; *CELL*, <u>87</u>, p.1171, 1996; *PNAS*, <u>94</u>, p. 3058, 1997: *SCIENCE*, <u>277</u>. p. 55, 1997).

Candidates who have strong molecular biology, cell biology, and/ or embryology training are encouraged to apply. Send CV and brief description of research interest and career goal to:

Thomas N. Sato, Ph.D.
The University of Texas
Southwestern Medical Center
5323 Harry Hines Blvd.,
NB11.200
Dallas, Texas 75235-8573

FAX: 214-648-1450 E-MAIL: Island1005@aol.com

UT Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.



The mission of The Picower Institute for Medical Research is to apply the insights gained from basic laboratory and clinical research to the cure of disease and the improvement of human health.

FACULTY AND JUNIOR INVESTIGATORS IN MOLECULAR MEDICINE

Established in 1991, The Picower Institute for Medical Research is undergoing a substantial growth phase that will result in doubling its size. We are seeking innovative and dynamic individuals interested not only in doing research, but also having their research move to clinical application.

Successful candidates will establish creative new research groups within The Picower Institute's highly interactive and interdisciplinary "laboratory without walls" research facility. It is a unique environment where a multi-disciplinary population of well-published, collegial scientists can interact in carrying out focused research programs in molecular medicine.

Your research programs will address the pathogenesis of human disease at the molecular level, complementing existing programs and reinforcing our efforts in:

MOLECULAR BIOLOGY
 Munology
 Oncology

Your research will be an integral part of our team-building approach that encourages collaboration with bio-organic chemistry, structural biology, and molecular modeling to develop novel pharmaceutical and diagnostic technologies.

The Picower Institute for Medical Research is a fully independent, medical research organization located on Long Island's historic North Shore. We operate a New York State-chartered Ph.D. program in Molecular Medicine - open to recent M.D. graduates - and also publish the international research journal, Molecular Medicine.

Applicants with a proven track record of "cutting edge" research are encouraged to apply for both faculty and junior investigative positions by forwarding a c.v., a list of publications and references to: Department-FES, The Picower Institute for Medical Research, 350 Community Drive, Manhasset, New York 11030, USA; Fax #: (516) 365-5090; e-mail: hr@picower.edu. We are an equal opportunity/affirmative action employer.

B I O T E C H N O L O G Y OPPORTUNITIES

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Progenics Pharmaceuticals, Inc. is a leader in the discovery and development of innovative products for the treatment of cancer and viral diseases. We have collaborations with major pharmaceutical companies as well as leading academic laboratories in the US and Europe, and encourage presentation of scientific advances at meetings and in leading journals. The continued growth of the company has created outstanding opportunities for highly motivated, team-oriented individuals to work in a multidisciplinary environment in the following areas:

DIRECTOR, IMMUNOLOGY

The successful candidate will lead an experienced team in the development of novel vaccines and monoclonal antibodies targeting protein and carbohydrate antigens to treat cancer and viral diseases. For this newly created and challenging position, we seek exceptional candidates who possess a track record of industrial or academic accomplishments, broad experiences in cancer or viral immunology and assay development, excellent communication skills, and supervisory experience. This position requires a Ph.D., 7 years' industrial experience with a strong publication record, and familiarity with cGMPs and FDA regulatory processes.

DIRECTOR, MOLECULAR BIOLOGY AND GENE EXPRESSION

The successful candidate will lead an experienced team performing molecular biology, cell line development and expression of novel recombinant proteins. Exceptional candidates are sought for this new position who possess a track record of industrial or academic accomplishments, broad experiences in molecular biology and gene expression in eukaryotic and prokaryotic systems, excellent communication skills, and supervisory experience. A background in oncology or virology is preferred. This position requires a Ph.D., 7 years' industrial experience with a strong publication record, and familiarity with cGMPs and FDA regulatory processes.

SENIOR SCIENTIST, PROTEIN CHEMISTRY

We are seeking a highly motivated, hands-on scientist with a Ph.D. and 4 years' experience in protein purification, analysis and modification. This individual will design innovative purification strategies for complex glycoproteins, integral membrane proteins, and novel constructs. Familiarity with surface plasmon resonance techniques would be an advantage.

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RESEARCH ASSOCIATES

Outstanding individuals are sought who possess a BS/MS degree and significant experience in one or more of the following areas: immunology, molecular and cellular biology, oncology, virology, and cGMP biologics manufacturing.

Progenics offers a highly competitive salary and benefits package and a stimulating, highly interactive research setting that recognizes and rewards achievement. We are situated in a state-of-the-art research facility on an attractive campus in Westchester County, NY, 20 miles north of Manhattan. To apply, please submit a CV, description of your research experiences, and a list of 3 references to: Human Resources-SCI, Progenics Pharmaceuticals, Inc., P.O. Box 549, Tarrytown, NY 10591. EOE



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nature *Neuroscience*

seeks two

ASSISTANT EDITORS

The publishers of *Nature* have announced the forthcoming launch of *Nature Neuroscience*, an international monthly journal covering all aspects of neuroscience.

Nature Neuroscience will publish papers of the highest quality in all areas of neuroscience, reflecting the multidisciplinary nature of the field and providing a forum for communicating important advances to a broad readership. News & Views articles, reviews, editorials, opinion and correspondence will accompany the original research.

Nature Neuroscience seeks to recruit two Assistant Editors. These posts will be based in the Nature America editorial office in New York City. Applicants should have a strong research background in neuroscience, a broad interest in the subject, excellent literary skills and a commitment to the communication of scientific ideas.

This is an exciting opportunity to participate in the launch of a major new journal and to play a key role in shaping its future. The successful candidates will work closely with the Editor on all aspects of the editorial process, including manuscript selection, commissioning and editing reviews, writing for the journal and liaising with the scientific community. They will also join a dynamic editorial and publishing team responsible for Nature Genetics, Nature Structural Biology, Nature Medicine and Nature Biotechnology.

Please submit a CV, a short (500-1000 words) News & Views-style article on an exciting and newsworthy recent development in any area of neuroscience, and a short cover letter explaining your interest in the post, to: Mary Waltham, President, Nature America, 345 Park Avenue South, New York NY 10010-1707. (Fax 212 696 9006; e-mail neurosci@natureny.com) to arrive as soon as possible and no later than 7 December 1997.



Nature America, Inc. 345 Park Ave. South New York, NY 10010

REGIONAL MEDICAL ASSOCIATE nithKline Beecham is a \$12.3 billion global pharmaceutical a

SmithKline Beecham is a \$12.3 billion global pharmaceutical and healthcare company. Our world famous products and reputation provide unsurpassed opportunities for individuals to combine both scientific expertise and business skills as a Regional Medical Associate.

We are currently seeking a qualified individual to fill an opportunity for Regional Medical Associate in southern California.

Our Medical Associates establish relationships with various healncare providers, including managed care organizations. They act as medical liaisons providing scientific information regarding SmithKline Beecham products. Additionally, Regional Medical Associates provide training support for our regional sales staff and also provide strategic support in helping us to achieve our national and regional business objectives. 15-20% travel will be required.

To qualify, a Ph.D. or PharmD is required. Pharmacology, Toxicology, Microbiology or related Life Science backgrounds are preferred. Strong communication skills, high energy levels, excellent interpersonal skills and excellent planning and organizational skills are also required. Business/marketing knowledge along with a past record of successes is a definite plus.

We offer on of the best compensation packages in the industry, including a cat. If you'd like to be part of our success and can effectively perform in a dynamic atmosphere of change and innovation, send 2 COPIES of your scannable resume (no folding, staples or graphics) with salary history to: SmithKline Beecham Pharmaceuticals, Job Code MCZZ71, 1500 West El Camino Avenue, Suite 13, Box # 518, Sacramento, CA 95833. No phone calls, please. For more information on SmithKline Beecham, visit our website at www.sb.com/careers. We are an Equal Opportunity Employer, M/F/D/V.



Research Opportunities Virology & Parasitology Dept.

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, is currently seeking dynamic, dedicated research professionals to join Dr. Sara Lustigman's laboratory:

Sr. Research Fellow

Utilizing an integrated research approach, you will be responsible for developing a new project designed to study the function of enzymes and protective antigens of the parasitic nematode *O. volvulus*. Project involves using the free living nematode *C. elegans* as the model. To succeed in this challenging position, you will need a Ph.D. degree with previous molecular biology and gene expression (in *C. elegans*) experience.

Research Fellow

As an integral member of our Onchocerca group, you will work on the identification, cloning and characterization of novel proteins relevant to the development and molting of the *O. volvulus* larvae. Responsibilities include characterizing putatively protective antigens of the parasite which have been evaluated as vaccine candidates as well as developing antigens as naked DNA vaccines. This exciting position requires a Ph.D. degree and previous molecular biology and immunology experience.

We offer a competitive salary and a comprehensive benefits package. For immediate consideration, please fax (212)570-3195, or send your resume to: Mary Koester, Human Resources Department, New York Blood Center, 310 East 67th Street, New York, NY 10021. EOE M/F/D/V

& Lindsley F. Kimball

Research Institute
A Division of the New York Blood Center

Nature America Inc.

Purdue Pharma L.P., a growing ethical pharmaceutical company, is expanding our R&D facility which is located 15 minutes from the GWB in southern Westchester County, NY. The following are highly visible positions in a rapidly growing environment.

Pharmaceutical R&D Opportunities

PHARMACEUTICAL ANALYSIS SCIENTISTS

We are looking for highly motivated, creative scientists.

Successful applicants will be responsible for assay and trace impurities method development and validation, setting specifications, novel dissolution methodologies and special projects. Industrial pharmaceutical analysis experience in research and development is preferred, as well as experience with HPLC, GC, UV/VIS, DSC, other experimental techniques and wet chemistry. This work is critical to new product development and will comprise the CM&C sections of INDs and NDAs. Knowledge of GMPs and good documentation skills are essential. Requirements include a degree in chemistry. Position(s) are also available for individuals who have experience in biotechnical products analytical methodology such as ELISA, electrophoresis, and HPLC.

ASSISTANT DIRECTOR/DIRECTOR

Proven managers are needed to lead the analytical development efforts of multiple new products. Product types include controlled release solid oral, injectables, transdermals and biotechnically derived dosage forms. Qualified applicants will have 5+ years of experience in pharmaceutical analysis of drugs, excipients, and dosage forms in preparation for regulatory submission. Knowledge of FDA/ICH requirements is mandatory. At least 5 years of experience supervising a group of 12 or more scientists is essential. A proven success record is required. Respondents must be self-starters with demonstrated leadership qualities.

RESEARCH QUALITY ASSURANCE AUDITORS

Two positions are available. Responsibilities include performing internal and external GMP/GLP audits. Participation in process validation and team-driven activities will also be expected. To qualify, you must have a B.S. or M.S. Degree in Science, QC/QA pharmaceutical industry experience and strong oral and written communication skills. Audit expertise in a research environment is a definite plus.

SECTION LEADER - DRUG METABOLISM

This newly-created position requires a minimum of 5 years pharmaceutical expertise in analyzing drugs primarily by HPLC in biological fluids. Previous supervisory and managerial experience is required together with outstanding written and verbal communication and interpersonal skills. This position will be responsible for a group of 5-7 scientists involved with methods development, method validation and routine bioanalyses in support of both preclinical and clinical studies. Candidates must possess exceptional competency in the application of current regulatory requirements (cGLP, cGMP, cGCP) to the bioanalytical laboratory environment. Creativity and initiative are needed for this key position.

TOXICOLOGIST

We are seeking an individual to oversee non-clinical drug safety evaluation studies. This includes selecting contract labs; performing on-site monitoring; reviewing, summarizing and interpreting the studies as well as writing the non-clinical portions of regulatory submissions, both domestic and international. Approximately 40% travel required. A Ph.D. in toxicology is preferred together with at least 3 years experience in performing non-clinical toxicology/drug evaluation studies at a pharmaceutical company or contract laboratory. Solid knowledge of pharmaceutical regulatory toxicology and GLPs is a must. Knowledge of opioid pharmacology/toxicology and non-clinical development of biologicals is desirable.

PHARMACOLOGIST/BIOLOGIST

This successful candidate will design and perform preclinical in-vitro and in-vivo studies for the evaluation of pharmacological agents on biological systems. Applicants must have experience with a variety of techniques including receptor binding assays, cell and tissue culture, Northern/Western blots, HPLC, TLC, RIA, ELISA, microscopy, staining, and in animal handling (dosing, immunizing, blood collection). The selected individual must be capable of providing written draft protocols, study plans and results for a variety of report formats. An advanced degree and demonstrated solid computer skills using analysis and report software programs are also required.

THESE ARE HIGHLY VISIBLE POSITIONS IN A RAPIDLY GROWING ENVIRONMENT.

Purdue Pharma L.P. offers competitive salaries, an extensive benefits package and excellent opportunities for personal advancement and professional growth. Company standards require drug testing. Please mail resumes, indicating position of interest, to: Purdue Pharma L.P., Dept -SR/SM, 99-101 Sawmill River Road, Yonkers, NY 10701 or fax to (914) 966-4390. Equal Opportunity Employer M/F/D/V.

Purdue Pharma L.P.

Science into Practice

POSITIONS OPEN

FACULTY POSITION IN METABOLIC/ DEVELOPMENTAL TOXICOLOGY

The Division of Nutritional Sciences and Toxicology. University of California at Berkeley is seeking an ASSIS-TANT PROFESSOR OF TOXICOLOGY for a ninemonth tenure-track position beginning July 1, 1998. The appointee is expected to develop an independent research program on the interaction of diet and the toxic effects of chemicals. Areas of interest include, but are not limited to, the role of dietary and/or environmental substances in the cause or prevention of diseases of abnormal development and the role of genetic variability and/or nutritional status in susceptibility to toxins with relevance to human health. The appointee may work with graduate students seeking advanced degrees in toxicology, nutrition, environmental health sciences, public health, comparative biochemistry, or related fields. The applicant should pref-erably be trained in the field of developmental or reproductive biology and must hold a Ph.D. or equivalent degree, preferably in toxicology, and have demonstrated potential for excellence in research. Individuals trained in nutrition or basic molecular sciences and with interests in toxicology are also encouraged to apply. Teaching assignments will include an undergraduate course in the area of nutritional or reproductive toxicology. Applications should be sent to: Leonard Bjeldanes, Chair, Toxicology Search Committee, Division of Nutritional Sciences and Toxicology, 119 Morgan Hall, University of California, Berkeley, CA 94720-3104 and should include a curriculum vitae, a statement of research interests, copies of up to three publications related to current research interests, and a brief description of teaching and professional experience. Applicants should submit the names of at least three references who are able to evaluate their research and teaching potential. Application dead-line: December 31, 1997. Applications submitted after the deadline will not be considered. The University of California is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST AND SCIENCE EDUCATOR ASSISTANT PROFESSOR TENURE-TRACK

Requires an earned doctorate in biology or science education with a biology emphasis and expertise in elementary science instruction. Responsibilities include teaching introductory biology, a capstone course for elementary science majors, and a science methods course. There is opportunity to develop curriculum in conjunction with the Biology Department and the School of Education. Other responsibilities include advising students, committee assignments, continuing scholarly acitivities, and community service. Preference will be given to applicants with demonstrated success in teaching, knowledge, or experience with national science and NCATE standards, and scholarly activity in biology or science education. Submit letter of application, curriculum vitae, statement of teaching philosophy, statement of research interests, copies of transcripts, and three letters of reference to: Paul A. Huizenga, Chair, Biology and Science Education Search Committee, Department of Biology, Grand Valley State University, Allendale, MI 49401-9403. E-mail questions to e-mail: huizenga@gvsu.edu. See website: www.gvsu.edu. Applications must be postmarked by January 2, 1998. Grand Valley State University is an Affirmative Action/ADA and Equal Opportunity Employer

The University of Wisconsin-La Crosse invites applications for a TENURE-TRACK POSITION in the Department of Biology/Microbiology. Applicants must have a Ph.D. in the field of genetics and a commitment to both teaching and research. The successful candidate will be expected to teach an introductory genetics course and an upper-level undergraduate course in human/medical genetics. In addition, the successful candidate is expected to develop an externally funded research program for undergraduate and graduate (M.S.) students focusing on eukaryotic genetics, using an experimental system other than plants. Applicants should submit a letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: Dr. Thomas O. Claflin, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, La Crosse, WI 54601. All application materials must be received no later than December 1, 1997. University of Wisconsin-La Crosse is an Affirmative Action/Equal Opportunity Employer. Women, persons of color, and individuals with a disability are particularly encouraged to apply.

POSITIONS OPEN

FACULTY POSITION IN HUMAN NUTRITION AND METABOLISM

The Department of Nutritional Sciences, University of California at Berkeley is seeking an ASSISTANT, ASSOCIATE, or FULL PROFESSOR OF NUTRI-TION for a nine-month tenure-track position beginning July 1, 1998. The appointee is expected to have established, or shown strong potential for developing, an independent research program in the general area of metabolic regulation, nutritional biochemistry, or nutritional disorders. Research need not involve humans directly, but should be ultimately applicable to human nutrition and metabolism. Areas including genetics, endocrinology, metabolism, physiology, and energetics are appropriate. An interest in the biologic basis or consequences of obesity is an advantage but is not required. The appointee may work with graduate students seeking advanced degrees in nutrition, toxicology, comparative biochemistry, endocrinology, or related fields. the applicant must hold a Ph.D. or an M.D. or equivalent degree. Teaching assignments will be in the area of human nutrition and health. Applications should be submitted to: Marc Hellerstein, Chair, Human Nutrition and Metabolism Search Committee, 119 Morgan Hall, University of California, Berkeley, CA 94720-3104. Applications should be accompanied by a complete curriculum vitae, a statement of research interests, copies of two to three publications related to current research interests, and a brief description of teaching and professional experience. Applicants should submit the names of three references who are able to evaluate their academic, teaching, and research accomplishments. Application deadline: December 31, 1997. Applicants submitted after the deadline will not be considered.

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

FACULTY POSITION DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS UMDNJ-New Jersey Medical School

The University of Medicine and Dentistry of New Jersey–New Jersey Medical School, Department of Microbiology and Molecular Genetics seeks applications for a tenure-track position in the fields of growth regulation in mammalian cells or cancer genetics. While primarily looking to make an appointment at the level of ASSISTANT PROFESSOR, distinguished applicants at SENIOR LEVELS will also be considered. Department faculty have established research programs in diverse experimental systems and include control of cell proliferation; cellular aging; transcriptional, post-transcriptional, and translational regulation; mutagenesis; DNA replication and recombination; chromosome structure and segregation; human molecular genetics; and molecular pathogenesis of viruses, bacteria, and trypanosomes. The successful candidate is expected to develop an independent research program and participate in teaching of graduate and medical students.

New Jersey Medical School is part of the medical university of the state of New Jersey and is located in the University Heights section of Newark, New Jersey, minutes from both pleasant suburbs and downtown New York City.

Send a complete curriculum vitae including future research plans and arrange to have three letters of recommendation sent to: Dr. Harvey L. Ozer, Chairman, Department of Microbiology and Molecular Genetics (S), UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103-2714. UMDNJ is an Affirmative Action/Equal Opportunity Employer/Minorities/ Females/Disabled/Veterans and is a member of the University Health System of New Jersey.

BIOLOGY. TENURE-TRACK POSITION beginning August 1998. Applicant should have strong dedication to teaching genetics and molecular biology, general physiology, human anatomy, general biology, and accompanying laboratories, plus a general studies course. Must be willing to develop and participate in undergraduate research. Ph.D. required. Teaching experience preferred. Emory & Henry College enrolls 850 students. Apply with curriculum vitae, name of three references, statements of teaching philosophy and research interests to: Dr. James Dawsey, Emory & Henry College, P.O. Box 947, Emory, VA 24327-0947. Deadline is December 8, 1997. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS

The University of Maryland School of Pharmacy invites applications for several tenure-track faculty positions at the ASSISTANT or ASSOCIATE PROFESSOR levels in the Department of Pharmaceutical Sciences. This diverse department has 30 full-time faculty and 80 graduate students. The research focus areas of the department include molecular and neuropharmacology, drug discovery, rational drug design, drug delivery, industrial pharmaceutics, formulations, and pharmacokinetics. The candidates must hold a doctoral degree and demonstrate research excellence in areas compatible with those of the department. Candidates with expertise in molecular pharmacology and biology, organic chemistry, biochemistry, pharmacokinetics, pharmaceutics are encouraged to apply. The successful candidates must have a commitment to teaching and research. They will be expected to participate in teaching students enrolled in the Graduate and Doctor of Pharmacy Programs and to establish an independent and innovative research program. Review of applications will begin on November 17 and will continue until all positions are filled.

Applicants should send a letter of intent, curriculum vitae, short description of research plans, and the names and addresses of at least three references to:

Dr. Ginette Serrero, Chair Faculty Search Committee Department of Pharmaceutical Sciences University of Maryland School of Pharmacy 20 North Pine Street Baltimore, MD 21201-1180

The University of Maryland is an Affinnative Action/Equal Opportunity/ADA Employer. Women and minorities are encouraged to apply.

CHAIR DEPARTMENT OF BIOCHEMISTRY

Case Western Reserve University School of Medicine is seeking an outstanding scientist and leader to head the Department of Biochemistry. This is an exceptional opportunity to lead a prominent Department with a record of excellence in teaching and research in an unusually collabortive and open academic environment. The candi date is expected to hold a Ph.D. and/or M.D. degree, should qualify for appointment at the rank of Professor, and should have demonstrated administrative and leadership ability, with a strong record of accomplishment in research and training in areas relevant to modern biochemistry. The successful candidate will provide leadership in defining the future direction of the Department and in maintaining the excellence of its research and teaching missions. For information on the Department, see website: http://www.cwru.edu/med/biochemistry/ home.html.

Interested candidates should send a curriculum vitae to: Search Committee for Biochemistry Chair, c/o Huntington F. Willard, Ph.D., BRB 731, Case Western Reserve University School of Medicine, Cleveland, OH 44106-4955. E-mail: hfw@po.CWRU.edu.

Case Western Reserve University is an Affirmative Action/ Equal Opportunity Employer. Qualified women and minority group members are encouraged to apply.

CHAIR, DEPARTMENT OF NEUROSCIENCES CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

The School of Medicine at Case Western Reserve University invites applications for the position of Chair of the Department of Neurosciences. The Department was formed in 1989, and now has 12 primary faculty (two additional faculty are being recruited), with particular excellence in developmental neurobiology and in neural plasticity. In 1996, the Department ranked sixth in the nation for NIH grant support (the School of Medicine ranked tenth). For additional information, visit the Department's website: http://neurowww.cwru.edu. This is an exceptional opportunity to take a leadership role in a respected, thriving, and growing Department. If you wish to be considered as a candidate, please send a curriculum vitae to: Dennis M. D. Landis, M.D., Chair, Search Committee for Neurosciences, Departments of Neurology and Neurosciences, School of Medicine E-604, Case Western Reserve University, Cleveland, OH 44106. Telephone: 216-844-3193; FAX: 216-844-5066; e-mail: ddl@po.cwru.edu. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer; applications are encouraged from members of underrepresented groups.

TENURE-TRACK POSITION IN PEDIATRIC OBESITY RESEARCH

The Developmental Endocrinology Branch, NICHD, is offering a tenure-track position for a clinical investigator to establish an independent, patient-based research program in the field of childhood obesity. The Branch has strong lab-based research programs in molecular and genetic aspects of metabolism which may provide collaborative support for the clinical program. The NICHD also has outstanding behavioral scientists offering the opportunity for collaboration in behavioral studies on the development or treatment of obesity, and the NIH Clinical Center offers advanced functional imaging technologies for non-invasive clinical measurements of metabolic activity in human subjects. The tenure-track candidate may be supported for up to 6 years before conversion to tenure is required. Candidates should send a CV, a statement of research plans, and arrange for at least three letters of recommendation to be sent to: Ms. Sue Perdue, NIH; Bldg. 10, Room 10N262; 10 Center Drive MSC 1982; Bethesda, MD 20892-1862. Fax 301-402-0574. Closing date is December 26, 1997.

The NIH is an Equal Opportunity Employer.

EUROPEAN CAREER OPPORTUNITIES

Max-Planck Institute for Biochemistry Molecular Medicine

Positions for two Postdoctoral Fellows and three Ph.D. Students

are available for 3-5 years in the field of molecular and developmental biology with emphasis on cartilage and bone formation. Using the techniques of gene targeting and homologous recombination (Cre/lox system) the focus of the research group will be the identification of the roles of certain genes in the development of the skeleton.

Applications of candidates are invited who have the experience in cellular/molecular and developmental biology. Knowledge of transgenic and knockout procedures would be preferred. Please submit curriculum vitae, names and addresses of three referees, and a list of publications to:

Beate Lanske, Ph.D.,
Max-Planck Institut für Biochemie,
Am Klopferspitz 18 A, 82152
Martinsried bei München, Germany.
The deadline for applications is
December 10, 1997.



ONCOLOGY RESEARCH AT SCHERING-PLOUGH

Schering-Plough Research Institute is committed to first-rate scientific research that results in discovering breakthrough therapeutic agents that will improve the health and extend the lives of millions of people around the world. As we continue to experience unprecedented growth, we are moving confidently into the 21st century and seek exceptional Scientists whose goal is to make a difference in Oncology Research.

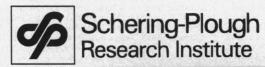
SENIOR PRINCIPAL SCIENTISTS

We are seeking two scientists with expertise in the Molecular Biology/Biochemistry of oncogenic and/or apoptotic signal transduction. Candidates should have 5+ years of postdoctoral experience in either an academic or industrial setting and an outstanding publication record in their field. These individuals will strengthen our existing internal expertise in the Ras oncogene signaling pathway and the p53 apoptotic pathway. Prior experience in the oncology area is desirable, however the specific area of expertise is less important than solid scientific training and a demonstrated ability to carry out a highly productive, independent research program. Candidates will be expected to initiate a research program focused on defining molecular targets suitable for therapeutic intervention and to contribute to our overall objective of identifying novel anticancer agents for clinical development. Our group maintains a highly collaborative research environment where the ability to contribute to team efforts is critical. To be considered for these positions, please respond to Dept. ORPS-BP

SENIOR SCIENTIST

We are seeking a scientist with a strong background in Molecular Biology to join our Oncology research group. Preference will be given to individuals with demonstrated skills in cDNA cloning, cDNA probe synthesis and the use of computational tools for biological analysis. Candidates will be expected to initiate a research program focused on defining molecular targets suitable for therapeutic intervention with special emphasis on utilizing microarray technology, differential expression or related methodology. Individuals are expected to work in a highly collaborative environment. To be considered for this position, please respond to Dept. ORSS-BP.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at http://www.sp-research.com or send a scannable resume and cover letter, original copy only, referencing the Dept. Code for your position of interest, to: Human Resources-BP, Schering-Plough Research Institute, MS #1255, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Using Science for Human Advantage

POSITIONS OPEN

FACULTY POSITION

The Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School, together with the newly formed department of Cancer Biology at the Dana Farber Cancer Institute, invite applications for the position of ASSISTANT PROFESSOR. We seek exceptional individuals with potential to study fundamental problems in modern biology, including biochemistry, genetics, cell biology and development. Candidates should hold a Ph.D. and/or an M.D. degree and have demonstrated achievement in their fields.

The Dana Farber Cancer Institute is undergoing expansion of its basic research facilities on the occasion of its 50th anniversary, including the opening of the new Smith Research Building and recruitment of new faculty. This position offers significant scientific resources in a stimulating environment as well as the opportunity to teach graduate students. Applicants should submit a curriculum vitae, a summary of research accomplishments and future plans, and arrange for three letters of recommendation to be sent to the Chair of the search committee no later than January 15, 1998. Please address all materials to:

Dr. Pamela A. Silver Chair, Faculty Search Committee Dana Farber Cancer Institute 44 Binney Street Boston, MA 02115

E-mail: pamela_silver@dfci.harvard.edu

The Dana Farber Cancer Institute is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

FACULTY POSITION ASSISTANT PROFESSOR TENURE-TRACK—ENTOMOLOGY Purdue University

Incumbent will establish innovative research program centered on insect pests of Indiana field crops. Research: any basic or applied area of entomology considered. Experience with modern biological techniques and application essential. Opportunities available to be an active member of a team involving entomologists and members of other departments at Purdue, and to cooperate with scientists at other insitutions. Expected to actively pursue and secure external funding and participate in an established, active extension program. Responsibilities to be two-thirds research and one-third extension education. Expected to participate in teaching. Opportunity for international activities. Ph.D. degree in entomology or related science required. Salary: competitive, commensurate with background/experience. Applications accepted until December 10, 1997, or until a suitable candidate is found. Submit a letter of application, synopsis of research, extension goals and interests, curriculum vitae, transcripts, three letters of reference, and names and addresses of additional contacts to: Dr. Rick Foster, Search Committee Chair, Department of Entomology, 1158 Entomology Hall, Purdue University, West Lafayette, IN 47907-1158. Telephone: 765-494-9572; FAX: 765-494-2152; e-mail: rick_foster@entm.purdue.edu.

An Equal Opportunity/Affirmative Action Employer.

HARVARD UNIVERSITY DIVISION OF ENGINEERING AND APPLIED SCIENCES

Applications and nominations are invited for a tenuretrack junior faculty position in fluid dynamics, to begin in 1998.

Responsibilities include active participation in Harvard's undergraduate degree program in engineering sciences as well as in research and teaching at the graduate

Applications are welcome from individuals with research interests in experimental, computational, and/or theoretical aspects of areas such as: fluid transport processes, reactive flows, multiphase flows, materials processing, biomedical fluids, and complex fluids. A Ph.D. is required.

Applicants should submit, before March 1, 1998, a curriculum vitae, a statement of research and teaching interests, and the names, addresses (including e-mail), and telephone numbers of three references to: Professor Howard A. Stone, Chair of the Fluid Dynamics Search Committee, Pierce Hall 308, Division of Engineering and Applied Sciences, Harvard University, Cambridge, MA 02139. Harvard is an Equal Opportunity/ Affirmative Action Employer. We welcome applications from qualified women and minority group members.

POSITIONS OPEN

FACULTY POSITION IN SCIENCE EDUCATION (SEARCH REOPENED) College of Staten Island City University of New York

The Department of Education invites applications for an anticipated tenure-track position at the rank of ASSIST-ANT or ASSOCIATE PROFESSOR, to begin February or September 1998. Responsibilities: to teach undergraduate and graduate courses in science education, perform department and college service, advise students, and engage in scholarly activity.

Qualifications: doctorate in science education or a science with appropriate experience in the schools; evidence of commitment to research; familiarity with science education at the elementary and secondary levels, and expertise in its theory and methods. Salary range: Assistant Professor: \$34,011 to \$52,213; Associate Professor: \$42,186 to \$62,394.

College of Staten Island is located on a new, attractive 204-acre campus in a suburban setting in close proximity to New York City.

Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references to: Chair, Search Committee Science Education, Department of Education, 3S-208, College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314. Equal Employment Opportunity/Affirmative Action/ADA Employer.

PROFESSOR AND CHAIR, DEPARTMENT OF PHARMACEUTICAL SCIENCES. College of Pharmacy, Washington State University. Full-time, annual, tenured appointment at the rank of Professor available July 1, 1998. Earned doctorate degree in a biomedical discipline required. Must have an internationally recognized research program with history of extramural funding and the ability to maintain an independent research program. Excellent record in leading undergraduate and/or professional students. Experience in the development and implementation of professional, graduate, and undergraduate curricula and in facilitating the development of teaching, research, and service programs. Excellent interpersonal skills. Preferences: Experience in pharmacy education. Research focus in existing or related area of department's research focus (biopharmaceutics, pharmacokinetics/ pharmacodynamics, cancer pharmacology, immunology, toxicology, drug metabolism, and neuropharmacology) Salary is commensurate with experience. Nominations will be accepted. Screening of applications will begin January 15, 1998, and continue until the position is filled. To apply send letter of interest and qualifications, curriculum vitae, and the names, addresses, and telephone numbers of three references to (or for a complete vacancy announcement contact): Thomas Jerrells, Ph.D., Search Committee Chair, College of Pharmacy, Washington State University, P.O. Box 646510, Pullman, WA 99164-6510. E-mail: jerrells@mail.wsu.edu. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply

FACULTY POSITION STRUCTURAL BIOLOGY THE OHIO STATE UNIVERSITY

Applications are invited for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFES-SOR level. The new member will join ten current faculty in new laboratories at the Neurobiotechnology Center and hold a joint appointment in the Department of Medical Biochemistry, College of Medicine. The successful candidate is expected to develop a research program of relevance to the nervous system and apply structural approaches to study problems such as protein-nucleic acid and/or other macromolecular interactions. Excellent support facilities are available in the Neurobiotechnology Center. The Ohio State University has made substantial commitments through a Molecular Life Sciences and other initiatives to establish outstanding interdisciplinary programs in molecular neurobiology and structural biology. Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: Chair, Structural Neurobiology Search Committee, Neurobiotechnology Center, The Ohio State University, 206 Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210-1002. Deadline for receipt of applications is January 15, 1998. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.

POSITIONS OPEN

FACULTY POSITIONS CARDINAL BERNARDIN CANCER CENTER LOYOLA UNIVERSITY MEDICAL CENTER

Two faculty positions are available for outstanding candidates with an interest in head and neck cancer research. Expertise is especially sought in areas of tumor immunology or molecular mechanisms that regulate cancer metastasis. Successful applicants will be expected to establish collaborative interactions with both basic science and clinical investigators within the Cancer Center.

Qualified candidates will be provided with laboratory and office space in the new Cardinal Bernardin Cancer Center, and a competitive compensation and start-up funds package.

Applicants with an M.D. and/or Ph.D. should send a curriculum vitae with bibliography and a description of research interests by December 15, 1997, to: M. Rita Young, Ph.D., c/o Maggie Storti, Cardinal Bernardin Cancer Center, Loyola University Medical Center 2160 South First Avenue, Maywood, IL 60153. An Equal Opportunity Employer/Educator.

MOLECULAR BIOPHYSICIST

The Department of Biophysics and Biophysical Chemistry at the Johns Hopkins University School of Medicine (website: http://biophysics.med.jhu.edu) secks outstanding candidates for the position of ASSISTANT PROFESSOR. Appointments at more senior levels will be considered under exceptional circumstances. Applications are sought in all areas of molecular biophysics and biophysical chemistry including structural biology. Priority will be given to applications received by January 1, 1998. Please submit a curriculum vitae, a statement of research interests, and arrange to have three letters of recommendation sent to: Professor Jeremy M. Berg, Search Committee, Department of Biophysics and Biophysical Chemistry, The Johns Hopkins University School of Medicine, WBSB 713, 725 North Wolfe Street, Baltimore, MD 21205. FAX: 410-502-6910.

The Johns Hopkins University is an Equal Opportunity Employer.

NMR SPECTROSCOPIST

The NMR Center for Research and Development at the University of Alabama at Birmingham is seeking applicants for an OPEN RANK FACULTY POSITION. Applicants with strong training and experience in high field NMR spectroscopy including ¹³C, ¹H, and ³¹P will be given preference. The successful candidate will be expected to develop an independent and funded research program, collaborate with a highly interactive and productive group of investigators, and participate in an existing 4 Tesla NIH Research Resource Program (NCRR). Excellent laboratory space and generous start-up funds are available. Please send curriculum vitae, letters from three references, and a brief statement of your research interests to: Dr. Gerald M. Pohost, Director, Center for NMR Research and Development, BDB 105, University of Alabama at Birmingham Station, Birmingham, AL 35294. University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

COMMUNITY/ECOSYSTEM ECOLOGIST

The Department of Biology at Baylor University invites applications for a tenure-track ASSISTANT PROFESSOR position in community/ecosystem ecology beginning 1 July 1998. Applicants must have a Ph.D. and use modern techniques to study community or ecosystem processes or patterns. We especially encourage applications from individuals with expertise in simulation modeling. Position responsibilities: teach general biology for non-majors, and develop and teach an advanced course in area of specialty; establish a research program that can involve undergraduate and graduate students; participate in departmental and university service. By 2 January 1998, submit an application letter, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and have three letters of reference sent to: Kevin Gutzwiller, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 254-710-2911; FAX: 254-710-2969; e-mail: kevin_gutzwiller@baylor.edu; website: www.baylor.edu. Baylor University is a Baptist university affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disability to apply.

SCHOOL OF SCIENCE AND MATHEMATICS

Professor/Reader in Biomedical Sciences

Minimum £34,742

Sheffield Hallam University is geared to developing innovative and vocational courses. By working closely with business and the professions, our students are highly valued by industry.

The School of Science and Mathematics has made significant progress towards the goal of establishing a leading position in both undergraduate and postgraduate education and is now focusing on developing a strong research base. The refurbishment of the whole School and this appointment reflects the University's commitment to this growing area.

The 1996 Research Assessment Exercise (RAE) rating of 4, recently given to the Biomedical Sciences Division, has been acknowledged by the University as an outstanding achievement and has led to a Biomedical Research Centre being established within the School.

We are looking to appoint a Professor/Reader with a substantial research record and international standing in the field of biomedical sciences to actively shape the future development of this new Centre. To date the research focus has been on chronic inflammatory and degenerative diseases, but this appointment is expected to broaden research activities into other aspects of human diseases.

Possibly having benefited from extensive collaborations with industry, your role will be to develop these links to attract strong research funding that will then enable you to contribute

to research-led teaching and the development of cutting-edge research activities.

A salary will be within the range for a senior academic, minimum £34,742.

Please quote reference 532/97

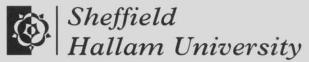
It is possible that the additional appointment of a lecturer or researcher may be associated with this post.

Further information and application forms are available from the Human Resources Department Sheffield Hallam University City Campus Pond Street Sheffield S1 1WB Telephone 0114 253 3951

Closing date 21 November 1997

Job share applicants welcome Working towards equal opportunities

World wide web http://www.shu.ac.uk/



Education for business and the professions

EUROPEAN CAREER OPPORTUNITIES

UNIVERSITY OF LEIPZIG

Clinical NMR-Spectroscopy Group Leader (la BAT-O)

The Interdisciplinary Centre for Clinical Research (IZKF) Leipzig will establish a research group to examine the application of NMR-Spectroscopy in neurological research with the potential to examine both humans and cells. Research can be conducted on a Siemens 1.5 T (Vision), Bruker 3 T (Medspec), and high-resolution NMR systems. The group leader is expected to cooperate with the faculties of Medicine, Physics, Chemistry, and Information Technology of the University of Leipzig as well as the neighbouring Max-Planck-Institutes.

In addition to the group leader, the group consists of 1 post doc Position, 2 PhD studentships, and a technical assistant. The successful candidate should possess a relevant PhD and significant postdoctoral experience in *in vivo* NMR-Spectroscopy. He will be expected to set up an internationally competitive group, and be involved in the appointment of the remaining group members. Knowledge of the German language would be helpful but not essential. Candidates should send a complete résumé before **07.12.97** to:

Universität Leipzig
Interdisziplinäres Zentrum für Klinische Forschung
Geschäftsführung
Herrn Dr. Jörg Noack
Liebigstraße 27, 04103 Leipzig

For further information, please contact IZKF Management, Dr. Jörg Noack, telephone +49-341-9715940.

The Carl Sagan Chair

The Carl Sagan Chair for The Study of Life in the Universe, a new endowed position, has been established at the SETI Institute in Mountain View, California. Named to honor the late Carl Sagan, who was a member of the Board of Directors of the SETI Institute, this Chair is established in recognition of the increasing scientific



interest and activity in studies of the origin, evolution, nature, and distribution of life in the universe, especially when viewed in the context of extraterrestrial biology. The individual selected for the Chair will be a distinguished scientist who is widely recognized as a major contributor to this field.

The holder of the Chair will be familiar with the broad picture of astrobiology and related phenomena in the physical sciences, and will have authored major publications in these areas. He or she will have outstanding credentials in one or more of the following fields: the early history of the biogenic elements and compounds; chemical evolution in the context of the origin of life; molecular evolution; Precambrian biology; the appearance of multicellularity; complex life; evolutionary biology; ecosystem science; the emergence of intelligence; cultural evolution; the rise of civilization and technology; and/or the associated disciplines of: astrophysics; astronomy; planetary evolution; geology; oceanography; geochemistry; and atmospheric science.

Responsibilities and opportunities of the position include continuing research in one or more of the areas described above, and serving as an intellectual leader of the Institute's life in the universe research efforts. The incumbent will lead the future expansion of these efforts, including the possibility of developing, over time, in-house laboratory research capabilities. The holder of the Chair will be a senior representative of the Institute in the scientific community at national and international levels, and as such will have a strong responsibility to advance the Institute's status and visibility within these communities.

Although it is generally expected that this endowed position will be a long term appointment, applications for sabbatical leave or other limited duration appointments will be considered. A salary commensurate with the holder's status in the scientific community will be provided, as well as financial support for an assistant, and travel.

Submit applications to: Sagan Chair Committee, SETI Institute, 2035 Landings Drive, Mountain View, California 94043-0818 USA, tel. 1-650-961-6633. Applications should include a current curriculum vitae and list of publications, and a brief statement of current research interests. Letters of reference will be solicited later. Review of applications will commence December 1, 1997. Equal Opportunity Employer.

POSITIONS OPEN

STANFORD UNIVERSITY OCEAN MARGINS INITIATIVE SECOND PHASE

A major component of future research and teaching in the School of Earth Sciences at Stanford University will be improved understanding of ocean/continental margins, both onshore and offshore. The Ocean Margins Initiative is a new program focused on the geology, geophysics, chemistry, and engineering science of ocean/continent margins and the record of environmental change preserved within coastal sediments. The hiring of two senior faculty into this program permits us to begin the second phase of our search for two additional faculty at the AS-SISTANT PROFESSOR level. Research areas that would fit well into our new program include, but are not limited to: satellite, surface, or subsurface-based remote sensing (utilizing acoustic electromagnetic, and/or optical techniques) of the coastal zone; coastal geochemical/biogeochemical cycles; quantitative geomorphic-neotectonic analysis; coastal resources including subsurface fluid (water, oil, gas, clathrates) and fluxes across the coastal interface; and the physical oceanography of coastal waters.

The Stanford Ocean Margins Initiative seeks Scientists and Engineers with demonstrated records of excellence in research who are committed to quality undergraduate and graduate teaching. An interest in applying new technologies and interdisciplinary strategies to the continental margin setting is particularly important. Special opportunities exist for collaborations with the nearby Monterey Bay Aquarium Research Institute, which has remarkable and expanding experimental access to the coastal ocean, and with Stanford's Hopkins Marine Station.

We plan to appoint two tenure-track faculty at the Assistant Professor level beginning with autumn quarter of 1998–1999 to complement the recent senior appointments. Applications, including a curriculum vitae, a statement of outlining research and teaching interests that would materially contribute to the Stanford Ocean Margins Initiative, and the names and addresses of three referees, should be sent 31 January 1998 to:

Dr. Franklin M. Orr, Jr. Dean, School of Earth Sciences Stanford University Stanford, CA 94305-2210

Stanford University has a strong institutional commitment to the principle of diversity. In that spirit, we particularly encouarge applications from women, members of ethnic minorities, and individuals with disability. Website: http://pangea.stanford.edu/.

TENURE-TRACK POSITION VERTEBRATE PHYSIOLOGIST

ASSISTANT PROFESSOR, tenure-track, beginning July 1, 1998, to teach animal physiology at the intermediate and advanced levels and participate in introductory biology. Ph.D. required. Excellence in teaching and development of an active research program involving undergraduates are essential.

Send statement of teaching and research interests, curriculum vitae, recent reprints, relevant courses taken (or transcripts) and taught, and three letters of recommendation to: Dr. Diana Stein, Department of Biological Sciences, Mount Holyoke College, South Hadley, MA 01075. FAX: 413-538-2548; e-mail: biology@mtholyoke.edu by December 15, 1997.

Mount Holyoke College is committed to fostering cultural diversity and multicultural awareness in its faculty, students, and staff, and is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.

ASSISTANT PROFESSOR YALE UNIVERSITY SCHOOL OF MEDICINE SECTION OF NEUROBIOLOGY

The Section of Neurobiology at Yale School of Medicine is seeking to fill two tenure-track positions at the Assistant Professor level in the following areas: molecular developmental neurobiology, and systems neurobiology/ cortical physiology. The candidates for these positions are expected to develop independent externally funded laboratories, as well as participate in departmental multidisciplinary research programs. Candidates with interests in cerebral cortex are preferred. Teaching responsibilities include graduate training and medical school courses. Send curriculum vitae and résumé by April 1 to: Chairman, Section of Neurobiology, Yale University School of Medicine, P.O. Box 208001, New Haven, CT 06520-8001. Yale University is an Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

MOLECULAR BIOLOGIST/ GENETICIST LOYOLA COLLEGE IN MARYLAND

Applications are invited for an entry-level, tenure-track ASSISTANT PROFESSOR position in the Biology Department of Loyola College in Maryland. Applicants must possess a strong commitment to teaching at all undergraduate levels and are expected to develop a research program that will actively engage undergraduates in research. The successful candidate will teach four courses a year with labs, including introductory and upper-level courses in the areas of cellular and molecular biology and molecular genetics. A Ph.D. and previous teaching experience are required. Additional information about Loyola College is available on-line at website: http://www. loyola.edu. Applications should be received by December 5, 1997. Please send a curriculum vitae, the names of three references, a statement of your teaching experience and approach to teaching, and your research plans and how they will include undergraduate students to: Dr. Donald Keefer, Biology Department, Loyola College, 4501 North Charles Street, Baltimore, MD 21210-2699. Loyola College is a Jesuit, Catholic College which welcomes applicants from all backgrounds who can contribute to our unique educational mission. Women and minorities are encouraged to apply. Loyola College is an Affirmative Action/Equal Opportunity Employer.

PLANT SYSTEMATIST/EVOLUTIONIST. The Department of Biological Sciences at California State University, Chico invites applications for a tenure-track ASSISTANT PROFESSORSHIP beginning in the 1998-99 academic year. Candidates must have a Ph.D., a specialization in plant systematics and evolution, experience with traditional and molecular techniques, a demonstrated knowledge of field botany, a demonstrated ability or potential to develop a vigorous research program, teaching experience at the undergraduate level, and a strong interest in teaching excellence. Postdoctoral experience is preferred. Responsibilities include teaching upper-division courses in vascular plant taxonomy and systematics, teaching lower-division organismal and intro-ductory biology courses including some courses with a field emphasis, developing a graduate course in area of specialization, establishing a research program with potential for external funding that will involve undergraduate and graduate students, and participating in the departmental program as needed. Normal faculty duties include undergraduate advising as well as 12–16 classroom hours of teaching per week. Applicants should submit a letter of application, curriculum vitae, a statement of teaching philosophy, complete academic transcripts, representative re-Prints, and three letters of reference to: Dr. Michael Abruzzo, Chair, Attn: Plant Systematics Position, Department of Biological Sciences, California State University, Chico, Chico, CA 95929-0515. To insure full consideration, completed applications should be received by January 16, 1998. California State University, Chico is an Equal Employment Opportunity/Affirmative Action/ADA/ IRCA Employer that is committed to a culturally diverse work force; hence all qualified individuals are encouraged to apply.

DEVELOPMENTAL BIOLOGY UNIVERSITY OF CALIFORNIA, RIVERSIDE

The Department of Biology seeks one (or two, pending funding) Developmental Biologists at the junior (tenure-track ASSISTANT PROFESSOR) or senior (tenured ASSOCIATE or FULL PROFESSOR) level. The successful candidate's research will focus on fundamental mechanisms of development using cellular, molecular, and genetic approaches. He/She will establish a vigorous research program, contribute to undergraduate and graduate curricula, and participate in our interdepartmental graduate research unit in cell, molecular, developmental biology. Applicants must have a Ph.D. degree and two or more years of postdoctoral training; senior applicants must have an excellent research and teaching record. A curriculum vitae, statement of research interests, copies of relevant publications, and three to five letters (or names and addresses of references) should be sent to: Chair, Search Committee, Department of Biology, University of California, Riverside, CA 92521 by January 5, 1998. The University of California is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT AND ASSOCIATE
PROFESSOR LEVELS
Tenure-Track Faculty Positions in
Earth and Environmental Engineering
Materials Science and Engineering
Columbia University
School of Engineering and Applied Science

Columbia University is transforming its historic Henry Krumb School of Mines into a center for excellence in education and research in environmentally and economically sound technologies for identifying, extracting, processing, and using earth resources including minerals, energy, and water, recycling of used materials, and environmental remediation. This program is affiliated with Columbia Earth Instittue, a major undertaking that includes Lamont-Doherty Earth Observatory and Biosphere 2. The University is searching for several highly qualified engineers (doctorate required) with a demonstrated interest in environmental applications, to develop strong research programs and teach graduate and undergraduate students in one of the following areas: physical processing of primary and recycled materials (waste management, resource recovery); materials science and engineering (emphasis on design for the environment); geomechanics; chemical/biochemical remediation).

Please send résumé to: Professor N. J. Themelis, Department of Earth and Environmental Engineering, Columbia University, Mail Code 4711, 500 West 120th Street, New York, NY 10027. E-mail: njtl@columbia.edu.

Applications should be submitted before December 31, 1997. Columbia University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF SOUTH CAROLINA MOLECULAR EVOLUTION

The Department of Biological Sciences at the University of South Carolina invites applications for a tenure-track faculty position at the level of ASSISTANT PRO-FESSOR. While the Department is primarily interested in individuals at the junior level, outstanding senior-level candidates will also be considered. Applications are encouraged from individuals with a demonstrated track record of research on the molecular and biochemical aspects of evolution. This includes, but is not necessarily limited to: genomics, macromolecular structure and function, development and pattern formation, physiological processes, and mechanisms of speciation and adaptation. The successful applicant will participate in the Department's undergraduate and graduate programs in mo-lecular/cell/developmental biology and ecology/evolu-tion/organismal biology, through both research and teaching. Interested individuals should submit a curriculum vitae, statement of research and teaching interests, and representative manuscripts, and should arrange to have three letters of reference sent to: Dr. Bert Ely, Chair, Molecular Evolution Search Committee, Department of Biological Sciences, Coker Life Sciences Building, University of South Carolina, Columbia, SC 29208. E-mail: ely@biol.sc.edu. Review of applications will begin December 1, 1997. Information on the Department and its facilities is available at website: http://zebra.biol.sc.edu/biology. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMIST

The Trinity College Department of Biology invites applications for a tenure-track position at the level of AS-SISTANT PROFESSOR beginning in the fall term, 1998. Applicants must have a Ph.D. in biochemistry (postdoctoral experience is preferred, but not required), a research interest in neurobiology, and participate in our Neuroscience Program. Teaching experience is desired. Annual teaching duties include two courses in biochemistry and participation in team-taught courses of introductory biology and of neurobiology. The candidate will be expected to pursue a program of research in the neurosciences in which upper-level students may participate. Excellent facilities and start-up funds are available. Send curriculum vitae (including statements of teaching philosophy, and of current research interests), graduate and undergraduate transcripts, and have three letters of recommendation forwarded to: Craig W. Schneider, Chair, Department of Biology, Trinity College, Hartford, CT 06106. Evaluation of applications will begin 15 December 1997 and continue until the position is filled. Trinity College is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from minorities and women.

POSTDOCTORAL POSITION

(1-2 years)

Astra is an international, research-based pharmaceutical company with subsidiaries in some fifty countries. Every day millions of people all around the world use pharmaceuticals from Astra. Astra has approximately 20,000 employees, of whom a third are in Sweden. Sales in 1996 totaled approximately SEK 39 billion. For more information about Astra, see: www.astra.com

ASTRA PAIN CONTROL AB
Astra Pain Control AB in Södertälje is
a research company belonging to the
Astra Group, with about 300 employees.
Our products dominate the world
market for local anaesthetics. Through
research and development we create
local anaesthetic and analgesic agents.

The Department of Cellular and Molecular Pharmacology at Astra Pain Control has the challenging task of defining novel molecular drug targets and establishing efficient drug screening systems in the area of pain relief. We are increasingly interested in exploring the potential of proteomics (large scale protein analysis) in the drug discovery process.

The successful applicant will be a biologist or biochemist with a background in protein separation (two-dimensional gel electrophoresis) and analysis and image analysis, and with good knowledge of bioinformatics. Good communication skills and initiative are important personal traits.

We offer good research resources and close collaboration with a group of biochemists, molecular biologists and pharmacologists and with external proteomics groups.

The department is situated in an academic environment at the Novum Research Park, Huddinge, south of central Stockholm.

For more information, please contact Lilian Wikström, lilian.wikstrom@pain.se.astra.com Tel. +46 8 553 254 54 or Johan Wallin Tel. +46 8 553 254 07.

Applications with full details should be marked 'Postdoctoral' and sent no later than November 21, 1997, to the following address: Astra Pain Control AB, Claes-Göran Persson, Personnel Support & Information, S-15185 Södertälje, Sweden.



MEDICAL RESEARCH COUNCIL LABORATORY OF MOLECULAR BIOLOGY, CAMBRIDGE, UK REGULATION OF HIV TRANSCRIPTION



A postdoctoral position funded by the MRC AIDS initiative is available in the group headed by **Dr. J. Karn**. The work of the group focuses on the HIV regulatory protein Tat. Ongoing projects include biochemical, genetical, and structural studies of the mechanism of action of Tat (for recent papers see **Keen at.al**. (1997) *EMBO J.*, **16**:5260–5272; **Hamy et. al**. (1997) *Proc. Natl. Acad. Sci. USA* **94**:3548–3553; **Keen et. al**. (1996) *Proc. Natl. Acad. Sci. USA* **93**:2503–2510). Experience will be preferred in the biochemistry of transcription, molecular virology, and/or gene expression in mammalian cells.

The post is available for three years. The salary range is between £14,500–£28,900 and the starting pay is likely to be up to £24,000. Further information can be obtained from **Dr. J. Karn, Tel: (0) 1223 402375. E-mail: karn@mrc-lmb.cam.ac.uk.**

Applications including two copies of a full CV, a list of publications, reprints of no more than three papers, and the names and addresses of three professional referees should be sent by 31 January 1998 quoting reference PNAC/ADP to:

Bob Tillson Personnel Manager, MRC Centre, Hills Road, Cambridge, CB2 2QH Applications from overseas are welcome. Some financial assistance with relocation may be available.

The Medical Research Council is an Equal Opportunities Employer.

POSITIONS OPEN

MARINE INVERTEBRATE ZOOLOGIST MOSS LANDING MARINE LABORATORIES (#SCI 98-044)

A tenure-track position at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR level for a field-oriented scientist with broad interests in marine invertebrate zoology and secondary interests in population ecology, toxicology, or molecular systematics. The successful applicant will have a strong commitment to quality undergraduate and graduate instruction and will pursue a vigorous research program involving graduate students. A Ph.D. is required. Instructional responsibilities will include invertebrate zoology, marine ecology (team-taught), and courses in the applicant's area of expertise. Position appointment effective beginning fall 1998 semester.

The salary range for the position is: Assistant \$36,000 to 45,756; Associate \$41,676 to \$57,840; Professor \$52,668 to 63,540.

Review of applications will begin November 30, 1997. Submit applications consisting of a letter stating teaching and research interests, goals and accomplishments, a curriculum vitae, and the names of three references to: Dr. H. Gary Greene, Director, Moss Landing Marine Laboratories, P.O. Box 450, Moss Landing, CA 95039.

For more information, visit Moss Landing Marine Laboratories' website: http://color.mlml.calstate.edu/www/.

An Equal Employment Opportunity/Affirmative Action/Title IX Employer.

UCLA FACULTY POSITION UCLA-DOE LABORATORY OF STRUCTURAL BIOLOGY AND MOLECULAR MEDICINE

The Division of Structural Biology and Genetics of the UCLA-DOE Laboratory of Structural Biology and Molecular Medicine will appoint a faculty member at the level of ASSISTANT PROFESSOR or ASSISTANT PROFESSOR IN RESIDENCE, jointly with departments in the College of Letters and Science or the School of Medicine. We seek a Biochemist with an interest in genome or proteome analysis. Set-up and research funds will come from the UCLA-DOE Lab. Candidates must have significant research accomplishments, the ability to establish a vigorous research program, and a commitment to excellence in education. Applicants should provide a curriculum vitae, a summary of proposed research, copies of key publications or preprints, and three letters of recommendation by December 20, 1997. Applications should be sent to:

Dr. David Eisenberg Chair of Search Committee UCLA-DOE Lab UCLA, Box 951570 611 Circle Drive East Los Angeles, CA 90095-1570 FAX: 310-206-3914

UCLA is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION STRUCTURAL BIOLOGY ASSISTANT OR ASSOCIATE PROFESSOR

Applications are sought for a tenure-track faculty position at the level of Assistant or Associate Professor in the Department of Medical Biochemistry, School of Medicine, Southern Illinois University at Carbondale. The ability to develop an active, externally funded research program and contribute to teaching in the School of Medicine and the Graduate Program in Molecular Biology, Microbiology, and Biochemistry is essential. Applicants are sought whose research interests will complement existing faculty and are interested in structural biology of macromolecules and assemblies. Applicants using NMR and/or X-ray crystallography are encouraged to apply. Minimum qualifications are a Ph.D. in biochemistry, chemistry, physics, biophysics, or in a biological science with a strong biochemical or physical orientation and two years of postdoctoral experience is preferred. Applicants should submit a curriculum vitae with a description of their research plans and have three letters of reference sent to: John Shriver, Chair, Structural Biology Search, Medical Biochemistry, School of Medicine, Southern Illinois University at Carbondale, Carbondale, IL 62901-4413. The deadline for receipt of the applications is 15 December 1997, or until the position is filled. SIUC is an Equal Opportunity/Affirmative Action University and encourages applications from women, minority, and persons with disability.

POSITIONS OPEN

PENNSTATE



ASSISTANT PROFESSOR PLANT MOLECULAR EVOLUTION PENN STATE

The Department of Biology at The Pennsylvania State University invites applications for a tenure-track position in plant molecular evolution at the level of Assistant Professor. Penn State has made a commitment to expanding research and education in the biological sciences through a new, university-wide Life Sciences Consortium (see website: http://www.lsc.psu.edu), which is co-funding the position. We seek candidates who use molecular techniques to address issues of importance in speciation, phylogenetics, gene flow in natural populations, conservation genetics, and/or biodiversity. Penn State attracts outstanding graduate students and has internationally recognized faculty research groups in molecular evolutionary genetics and plant biology (see website: http://www.bio.psu.edu). The successful candidate must have a Ph.D. in biology, botany, plant sciences, or a related area, and will be expected to establish a vigorous, externally funded research program, and to participate in the department's commitment to quality undergraduate and graduate education. Please send a curriculum vitae, including list of publications, a statement of research and have three letters of recommendation sent to: Chair, Plant Molecular Evolution Search Committee, De-Partment of Biology, 208 Mueller Lab, Box N, The Pennsylvania State University, University Park, PA 16802. The screening of applications will begin on December 15, and applications will be accepted until the position is filled. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

MARINE BIOLOGISTS. The Department of Biology at The University of West Florida invites applications for two tenure-track faculty positions at the level of AS-SISTANT PROFESSOR, available August 1998. We seek candidates with specialties in: marine vertebrate zoology; marine invertebrate zoology. Expertise in physiology is preferred for both positions, but excellent candidates with proficiencies in other areas that complement our existing faculty in marine biology will be considered. The successful candidates are expected to teach at the lower division (e.g., anatomy and physiology, general zoology), offer additional courses in the specialty at both the undergraduate and graduate levels, and develop an active research program involving undergraduate and Master's students. Qualifications include Ph.D. and postdoctoral research experience. Teaching experience is desirable. Applicants should submit a statement of teaching and research interests, curriculum vitae, transcripts, and three letters of reference by December 31, 1997, to: **Dr. John** P. Riehm, Chair, Department of Biology, The University of West Florida, Pensacola, FL 32514. E-mail: jriehm@uwf.edu. Additional information about the uni versity and department can be found at our website: http://www.uwf.edu. The University of West Florida is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

EUKARYOTIC GENETICS UNIVERSITY OF TEXAS AT ARLINGTON

The Department of Biology invites applications for a tenure-track position (ASSISTANT PROFESSOR) in genetics. Candidates with interests in any area of eukary-otic genetics are encouraged to apply, but preference will be given to those using molecular techniques to study developmental and/or evolutionary processes. Candidates must have a Ph.D.; postdoctoral experience preferred. The successful candidate will participate in undergraduate education, including a course in introductory genetics, graduate training, and establishing a vigorous research program. University of Texas at Arilington, located in the Dallas-Ft. Worth area, is the second largest university in the UT system. The Department offers B.S., M.S., and Ph.D. degrees. Submit a curriculum vitae, statement of research in progress and long-term research goals, reprints, and names and email addresses of three references to: Search Committee Chair, Department of Biology, Box 19498, The University of Texas at Arlington, Arlington, TX 76019-0498. Evaluation will begin January 15, 1998. UTA is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR UNIVERSITY OF WISCONSIN-MILWAUKEE

Molecular diagnosis/genetics. The Clinical Laboratory Sciences Program in the Department of Health Sciences at University of Wisconsin–Milwaukee is seeking applications for the tenure-track position of Assistant Professor with background in molecular applications in the diagnosis or study of disease states. The successful candidate will be expected to develop an externally funded research program in addition to teaching and directing graduate student research. Requirements: Ph.D. degree with experience in molecular techniques and Board-certification in an area of laboratory or diagnostic medicine. A back-ground in hemostasis or hematology desirable. Send statement of research interests, curriculum vitae, and names of three references postmarked by December 15, 1997, to: Dr. R. S. Lambrecht, Chair, Search and Screen Committee, University of Wisconsin-Milwaukee, Department of Health Sciences, P.O. Box 413, Milwaukee, WI 53201. Telephone: 414-229-2645; e-mail: rsl@csd.uwm.edu; website: http://www. uwm.edu/sahp. The names of applicants who have not requested their names be withheld, and the names of all finalists, will be released upon request. University of Wisconsin-Milwaukee is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR. Soil Physics, tenuretrack research and teaching position, Department of Crop and Soil Science, Oregon State University (OSU). Will teach classes and do research on soil water, soil physical processes, and watershed/landscape level fluxes; participate in interdisciplinary activities and collaborate with other OSU programs. Must have a Ph.D. in soil physics or closely related field, potential for excellence in teaching, excellent interpersonal skills, and ability to obtain extramural funding. Prefer an individual who has participated in multidisciplinary research. Review of applications will begin 2 January 1998; position will remain open until filled. Send letter of application, résumé, official transcripts, and arrange for three letters of reference to be sent to: Dr. Sheldon L. Ladd, Head, Department of Crop and Soil Science, Oregon State University, 3017 Agriculture Life Science Building, Corvallis, OR 97331-7306. Telephone: 541-737-2441; FAX: 541-737-5725; e-mail: ladds@css.orst.edu. Refer to the Department's website: http://www.css.orst.edu for more information about the position and the Department. Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

ASSISTANT PROFESSOR, INSTRUCTOR POSTDOCTORAL FELLOW THE HENRY HOOD RESEARCH PROGRAM The Pennsylvania State University College of Medicine

Scientific research positions are available immediately to investigate the molecular control of cardiac cellular growth in the laboratory of Dr. Kenneth M. Baker, located in the Sigfried and Janet Weis Center for Research. The NIH- and AHA-funded research group has focused interests ranging from molecular signaling pathways to transcriptional regulation. Individuals should have a Ph.D. and/or M.D., and a strong background in molecular and cellular biology and biochemistry with commensurate experience. These are Fixed-Term I positions. Send a description of your research interests, curriculum vitae, and three references to: Mrs. Barbara A. Brown, Administrative Assistant, Henry Hood Research Program, Sigfried and Janet Weis Center for Research, 100 North Academy Avenue, Danville, PA 17822-2601. For your health, the Weis Center for Research is a smoke-free campus. Affirmative Action/ Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR DNA RADIATION CHEMISTRY

EPR, ENDOR, crystallography, NMR, and HPLC are used to study ionizing radiation damage in DNA. Expertise in chromatography of oligoDNA and derivatives is desirable. The appointment starts spring of 1998, is renewable yearly, and is currently funded for four to five years. Salary is approximately \$38,000 plus benefits. Send curriculum vitae and three letters of reference by January 15, 1998, to: W. A. Bernhard, Box 712, Biochemistry and Biophysics, University of Rochester Medical School, Rochester, NY 14642. E-mail: william_bernhard@urmc.rochester.edu. Affirmative Action/Equal Opportunity Employer.

EUROPEAN CAREER OPPORTUNITIES

POSTDOCTORAL POSITIONS AVAILABLE



A.I. Virtanen Institute at the University of Kuopio is devoted for research in the areas of biotechnology, neuroscience, and molecular medicine (including gene therapy). Two postdoctoral positions are now available in Alzheimer's disease and neuroscience program. Both scientists will be working on the development of transgenic (mouse and rat) disease models for Alzheimer's disease. The applicants are required to have a strong molecular biology background, preferably also some experience in transgene technology. Their work will be supported by the excellent core facilities of the Institute which include a fully equipped embryo laboratory for the production of transgenic (mouse, rat, and rabbit) and gene-disrupted (mouse) animals, automated DNA sequencing service, oligonucleotide synthesis, gene therapy unit with special laboratories for retroviral and adenoviral vectors, NMR unit for imaging and noninvasive metabolic studies, sophisticated equipment for electrophysiological and behavioral studies as well as state-of-the-art morphometry unit. A.I. Virtanen Institute, with its some 140 employees also offers a dynamic and creative environment for top-level research in attractive physical surroundings The applicants should send their C.V., list of publications, a letter of reference, and all other relevant documents to Professor Paavo Riekkinen Sr. (Head of Neuroscience Unit), University of Kuopio, A.I. Virtanen Institute, P.O.B. 1627, FIN-70211 Kuopio, Finland (tel.: 358-40-501 9540, fax: 358-17-162 083). Further information can likewise be obtained from Professor Juhani Jänne (Head of Biotechnology Unit), e-mail: Juhani. Janne@uku.fi. The applicants are also welcome to consult the Institute's website at http://www.uku.fi/ laitokset/AIVirtanen/. The deadline for the applications is December 31, 1997.

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CARDIAC ELECTROPHYSIOLOGIST

We are seeking a Senior Research Pharmacologist to join Abbott's effort in cardiac electrophysiology. This person should be an independent, creative thinker with the skills and drive to champion the comprehensive evaluation of existing agents. In addition, the candidate will participate in the discovery of novel agents for the treatment of cardiovascular/renal disease states. Minimum requirements are a Ph.D. with 1-3 years of post-doctoral experience. The ideal candidate will have experience in cellular, in vitro, and in vivo models. A strong record of innovative research, as evidenced by publications in leading journals, is a major asset. Code 96-LAM-2496

CARDIOVASCULAR PHARMACOLOGIST

A talented **Pharmacologist/Physiologist** to participate in the discovery and testing of novel products to treat cardiovascular diseases is sought. The successful candidate will be a highly motivated scientist with a BS degree, MS preferred, and 3-5 years of laboratory experience. Excellent surgical skills and the ability to assist in the design and implementation of experiments, will be required. Experience with biochemical assays as well as computerized data acquisition will be considered advantages. *Code 97-LAM-0578*

NMR SPECTROSCOPIST

We seek a highly motivated NMR Spectroscopist to apply the "SAR by NMR" method (Science <u>274</u>, 1531, 1996; Science <u>278</u>, 497, 1997) to discover high affinity ligands for proteins and determine the NMR structures of protein/ligand complexes. For these studies, we have one 800, two 600, and three 500 MHz NMR spectrometers, excellent computing resources, and large quantities of different protein drug targets. The successful candidate will have a Ph.D. and 2+ years of postdoctoral experience in NMR studies of biomolecules, a strong interest in applying NMR to drug discovery, and extensive knowledge in the theoretical and practical aspects of NMR spectroscopy. The desire to work collaboratively in a team environment is very important. *Code 97-LAM-0418*

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POSITIONS OPEN

PLANT SYSTEMATICS

ASSISTANT PROFESSOR. Entry-level tenuretrack position, Ph.D. required. Responsibilities include: teaching undergraduate courses in systematic botany, general botany, and general biology; teaching selected graduate courses; serving as a mentor for undergraduate research and Master's theses; maintaining herbarium; seeking extramural funding. Candidate should have expertise in flora of eastern United States. Appalachian State University, with an enrollment of 12,000, ranks in the top four of the 16 University of North Carolina campuses in SAT scores, retention, and graduation rates. The Biology Department (website: www.biology.appstate.edu) has 21 faculty, 600 majors, and 35 graduate students. Send letter of application, curriculum vitae, description of research and teaching interests, and names, addresses, and telephone numbers of three references to: Dr. Douglas Meikle, Chair, Department of Biology, Appalachian State University, 572 Rivers Street, Boone, NC 28608. Telephone: 704-262-3025. Completed applications due by December 1, 1997. Appalachian State University is an Equal Opportunity Employer.

The Department of Chemistry and Biochemistry at San Francisco State University, invites applications for a tenure-track position at the level of **ASSISTANT PROFES**-SOR to begin fall 1998. Candidates with a Ph.D. in biochemistry and postdoctoral experience will be given the highest priority. Applicants must be capable of teaching the full range of biochemistry courses, must be committed to excellence in teaching and research, and are expected to initiate an externally fundable research program involving undergraduates and M.S. students. The successful candidate will have expertise in the physical characterization of the conformations and interactions of biomolecules using spectroscopic techniques such as NMR, UV, fluorescence, CD, FT-IR, MS, or EPR. Applicants should send a curriculum vitae, detailed description of research plans, and three letters of recommendation by December 1, 1997, to: Biochemistry Search Committee, Department of Chemistry and Biochemistry, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. Applications may also be submitted by e-mail: neu@sfsu.edu (all documents must be formatted in MS-Word). San Francisco State University is an Equal Opportunity/Affirmative Action Employer.

MESA STATE COLLEGE

Biology. Mesa State College invites applications for a tenure-track position in biology at the ASSISTANT PROFESSOR level. Ph.D. required. The successful applicant will teach 12 credit hours/semester including lower-division general biology courses and upper-division courses within their specialty. Preference will be given to candidates with expertise in cellular biology with an emphasis in cellular form and function. Experience with immunofluorescence and other labeling techniques is a plus. Interested candidates should send letter of application, résumé, statement of teaching philosophy, transcripts (unofficial), research interests, and names of three professional references to: Dr. Robert E. Kribel, Dean, School of Natural Sciences and Mathematics, Mesa State College, P.O. Box 2647, Grand Junction, CO 81502 by January 15, 1998, for full consideration. Position open until filled. To learn more about Mesa State College visit our website: www. mesastate.edu. Mesa State College is an Affirmative Action/ Equal Opportunity Employer.

University of South Carolina seeks applications from EXPERIMENTAL PHYSICAL CHEMISTS for a tenure-track position to begin August 1998 or January 1999 Preferred level of appointment is at the rank of ASSIST-ANT PROFESSOR, but applications for a more SE-NIOR appointment will be considered. We are especially interested in applicants whose research involves polymers, surface science, and/or interfaces. Ph.D. required; post-doctoral experience preferred. The successful candidate will be expected to establish a vigorous research program that will attract outside funding and to teach students at both the undergraduate and graduate levels. Applicants should send a curriculum vitae and a detailed description of research plans and arrange for three letters of recommendation to be sent to: Professor B. M. Gimarc, Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC 29208. Review of applications will begin November 15, 1997. Visit our website: http://www/cosm.sc.edu/chem. The University is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.

POSITIONS OPEN



ASSISTANT/ASSOCIATE PROFESSOR MANITOBA INSTITUTE OF CELL BIOLOGY The University of Manitoba

Applications are invited for a full-time tenure-track Assistant/Associate Professor in the Institute of Cell Biology, University of Manitoba. Depending on the area of specialization, an appointment with an appropriate academic department will also be available. Successful candidates are expected to establish an outstanding independent research program and participate in graduate teaching in a Cancer Research group. Qualifications include a Ph.D., M.D., or equivalent with at least three years of postdoctoral experience. Candidates with a strong research background in DNA repair, programmed cell death, development, or signal transduction will be given preference. Applicants must have obtained a significant publication record in peer-reviewed journals.

Applicants should send a curriculum vitae, an outline of research plans, and the names of three references to: Dr. Arnold H. Greenberg, Manitoba Institute of Cell Biology, 100 Olivia Street, Winnipeg, Manitoba R3E 0V9 Canada. Deadline for receipt of applications is December 22, 1997.

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disability. Priority consideration will be given to Canadian citizens and permanent residents.

ASSISTANT/ASSOCIATE PROFESSOR OF PHARMACOLOGY

The Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University, is seeking applicants for a full-time, tenure-track position. The successful candidate will share responsibility for pharmacology instruction to veterinary and graduate students. The candidate will be expected to develop an independent research program. Applicants must have the Ph.D.; postdoctoral experience is desirable, and a Doctor of Veterinary Medicine (or equivalent) is preferred. Applicants are invited to submit a letter of application, curriculum vitae, statement of research goals, and names of at least three references. Applications will be reviewed beginning January 16, 1998, and will be accepted until a candidate is selected. Applications should be sent to: Dr. Robert J. Kemppainen, Chair, Pharmacology Search Committee, 212 Greene Hall, Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University, Auburn, AL 36849. Telephone: 334-844-4425; FAX: 334-844-5388; kempprj@vetmed.auburn.edu.

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

ASSOCIATE DIRECTOR OF CLINICAL MICROBIOLOGY

The University of Virginia seeks an academic Clinical Microbiologist at the ASSISTANT/ASSOCIATE PROFESSOR level. The candidate will be expected to develop an externally funded research program consistent with the mission of the department. Candidates should have a proven record of scholarship in an area related to microbial pathogenesis with experience in laboratory microbiology. The candidate must be Board-certified/eligible in clinical pathology or clinical microbiology. A Fellowship in clinical microbiology is desirable. Submit inquiries to: Kevin C. Hazen, Ph.D., Director of Clinical Microbiology, Department of Pathology, Box 214, University of Virginia Health Sciences Center, Charlottesville, VA 22908. The University of Virginia is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT or ASSOCIATE PROFESSOR OF BIOENGINEERING, Penn State. Applications are invited for this tenure-track position, from individuals with a Ph.D. in the engineering or physical sciences to expand the direction of research and teaching beginning with the 1998-99 academic year. All areas of research interest will be considered. A strong background in the life sciences is desired as well as postdoctoral experience. Send curriculum vitae and names of three references by December 31, 1997, to: Dr. Herbert H. Lipowsky, Chairman, Bioengineering Program, Box S-SCI, The Pennsylvania State University, 233 Hallowell Building, University Park, PA 16802. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

PLANT-ANIMAL INTERACTIONS CONSERVATION BIOLOGIST

Tenure-track ASSISTANT PROFESSOR position starting August, 1998. Ph.D. required. Teaching and postdoctoral research experience desirable. The successful candidate will participate in undergraduate courses in introductory biology and ecology, and will develop a new course in conservation biology; this person will also con-tribute to the Environmental Studies and university-wide programs. The appointee will join a biology faculty deeply involved in a strong, research-oriented program for upper-class undergraduate students, and will contribute to this effort by offering an undergraduate course in plant-animal interactions. Please forward a letter of application with curriculum vitae, transcripts, a statement of teaching and research interests, and arrange to have three letters of recommendation sent by January 2, 1998, to: Dr. Randall Fuller, Chair, Department of Biology, Colgate University, Hamilton, NY 13346-1398. Website: http://www2.Colgate.edu/departments/biology.

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

CONSERVATION GENETICS

The Department of Biology, University of Miami, invites applicants for a tenure-track faculty position at the level of ASSISTANT PROFESSOR. We are looking for an individual who uses molecular techniques to address questions in the area of population biology with relevance to theoretical and empirical issues in conservation. Our Department has strength in the areas of ecology, behavior, evolution, and tropical biology. The successful candidate is expected to develop a vigorous, externally funded research program, and to participate in teaching at the undergraduate and graduate levels. Postdoctoral experience is preferred. Applicants should send curriculum vitae, appropriate reprints, summary of research interests, and arrange to have three letters of reference sent to: Conservation Genetics Search, Ken Spitze, Ph.D., University of Miami, Department of Biology, P.O. Box 249118, Coral Gables, FL 33124-0421. Review of applicants will begin on December 1, 1997. The University of Miami is an Equal Opportunity/Affirmative Action Employer and smoke/drug-free workplace. Women and minorities are encouraged to apply.

University of Maryland Baltimore County (UMBC) seeks applicants for a tenure-track ASSISTANT PRO-FESSOR position in the Department of Chemistry and Biochemistry starting fall 1998. Candidates will be expected to develop vigorous research programs in macro-molecular crystallography, teach at the graduate level, and teach physical chemistry at the undergraduate level. The Department has 19 tenure-track faculty and Ph.D. and M.S. programs in both chemistry and biochemistry. This appointment will be supported with X-ray crystallographic instrumentation and other laboratory needs, and will complement existing structural research programs in the Department employing NMR, fast spectroscopy, and mass spectrometry. Applicants should submit a curriculum vitae, a short description of future research plans, and have three letters of reference sent to: The Search Committee, Department of Chemistry and Biochemistry, University of Maryland, Baltimore County, Baltimore, MD 21250. UMBC is an Affirmative Action/Equal Opportunity Employer and applications from qualified women, minorities, and individuals with disability are encouraged. Applications will be accepted until the position is filled.

UNIVERSITY OF MICHIGAN SCHOOL OF DENTISTRY Department of Cariology, Restorative Sciences, and Endodontics

A full-time, tenure-track position at the ASSIST-ANT/ASSOCIATE PROFESSOR level is available in the Department of Cariology, Restorative Sciences, and Endodontics. Qualified applicants must have a Ph.D., and/or D.D.S./D.M.D. (or its equivalent). An active research program in the area of development or regeneration of dental tissues is desirable. Appointment will involve teaching in the predoctoral and graduate programs. Please submit a letter of interest, a curriculum vitae, and the names and addresses of three (3) references to: Dr. Ian Mackenzie, Chair of the Search Committee in the Department of Cariology, Restorative Sciences, and Endodontics, The University of Michigan, School of Dentistry, Ann Arbor, MI 48109-1078. The University of Michigan is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.

1997 Boehringer Mannheim/JDFI **Diabetes Care Research Award**

Presented at the International Diabetes Federation Congress





oehringer Mannheim is pleased to announce the 1997 winners of the \$100,000 Diabetes Care Research Award

Mike Mueckler, Ph.D. Professor of Cell Biology and Physiology Washington University, St. Louis, MO

Dr. Mueckler pioneered the Dr. Mucckier pioneered the identification and characterization of glucose transporter genes that are critical for the regulation of blood sugar levels; his work has led to a better understanding of how insulin acts at the molecular level to increase sugar uptake

Boehringer Mannheim Pat Tel: ++49 621 759 3142 Fax: ++49 621 759 4807 him_Thiery@bmg.boehringer-mannheim.com

Gerald I. Shulman, M.D., Ph.D. Professor of Medicine and Cellular and Molecular Physiology Yale University, New Haven, CT USA

Dr. Shulman has used nuclear magnetic resonance techniques to make the first real-time measurements of glycogen synthesis and its intermediate steps in human skeletal muscle in response to insulin; his research has revealed fundamental features of impaired glucose metabolism.



INTRAMURAL RESEARCH PROGRAM NATIONAL INSTITUTE OF MENTAL HEALTH NATIONAL INSTITUTES OF HEALTH

The National Institute of Mental Health Intramural Program is pleased to announce the availability of Intramural Research Training Awards in honor of Seymour S. Kety, M.D., first Scientific Director of the NIMH Division of Intramural Research (1951-1956). Applications are invited from U.S. citizens or permanent residents with a M.D. and/or Ph.D. degree with less than five years of postdoctoral experience. Awards will be made for up to three years and will provide the opportunity to work in any of the Program's 22 Clinical Branches and Basic Research Laboratories located on the 306-acre NIH Campus in Bethesda, MD. The program conducts a broad array of research activities that range from clinical investigation into the diagnosis, treatment, and prevention of mental illness to basic neuroscience investigation at the systems, cellular, and molecular levels (for description, see http:\\intramural.nimh.nih.gov). Deadline for applications is January 15th. To apply, submit a cover letter expressing research interests, a curriculum vitae, and two letters of recommendation to:

> Barry B. Kaplan, Ph.D. Director of Fellowship Training National Institute of Mental Health NIH Clinical Center, Room 4N-222 10 Center Drive Bethesda, MD 20892-1381. Phone: (301) 496-4183 E-mail: kaplanb@irp.nimh.nih.gov

The NIH is an Equal Opportunity/Affirmative Action Employer



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The qualified candidate should have an MS or PhD in Materials Science and Engineering or Biomedical Engineering. Post Doctoral experience in surface modification, material characterization, metallurgical processing or Medical Device development is highly desirable. Knowledge of structure-property relationships and the ability to define specific materials properties and manufacturing processes are required. You must have experience in XRD, TEM, SEM, AFM, XPS, and FTIR as well as knowledge of GMP, GLP, ISO and ASTM standards. Excellent communication and computer skills are a must.

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or to submit your resume electronically.

ETHICON

POSITIONS OPEN

Manhattan College/College of Mount Saint Vincent invites applications for a tenure-track ASSISTANT PROFESSOR position available August 1998.

GENETICIŜT/MOLECULAR BIOLOGIST. Teach introductory-level genetics course and upper-division courses in molecular biology. Ph.D. required, strong commitment to undergraduate education, advisement, and research, as well as ability to integrate computers into curriculum. Experience teaching introductory courses or anatomy and physiology or non-major microbiology a plus.

Send letter of application, curriculum vitae, statement of teaching philosophy, summary of research goals, and list of three references by December 12, 1997, to:

Dr. William Tramontano Chair, Department of Biology Manhattan College/College of Mount Saint Vincent 6301 Riverdale Avenue Riverdale, NY 10471-1093

Women and minorities are encouraged to apply. Affirmative Action/Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

The Department of Reproductive Medicine, University of California, San Diego (UCSD), seeks a basic scientist for full-time tenure-track/tenured faculty position as AS-SISTANT/ASSOCIATE PROFESSOR in molecular biology and physiology. Individual must be an established investigator with specific areas of interest in maternal or fetal research and grant funding. Successful candidate is expected to integrate with basic and clinical investigators in research program, emphasizing use of molecular approaches for study of development and regulation of fetal cardiovascular functions. Candidates must have Ph.D. degree with broad molecular biology experience. Salary determined by UCSD pay scale. Send curriculum vitae, a statement of research interest, and three references to: Dr. Cecilia Y. Cheung, Chair, Search Committee, Department of Reproductive Medicine, UCSD, La Jolla, CA 92093-0802, c/o Linda McKinny, Recruitment Coordinator by November 30. The UCSD is an Affirmative Action/Equal Opportunity Employer.

Georgetown University seeks an **INSTRUCTOR** for one semester to replace a faculty member on sabbatical leave for the spring of 1998. Teaching responsibilities will be a sophomore-level genetics course. This course is introductory, covering classical and molecular genetics. A full-time laboratory director will help to run the laboratory sessions associated with the course.

À Master's degree in biology, genetics, molecular biology, or a related field is required. A Ph.D. in one of these fields is preferred. The appointment will be from January 2, 1998, to May 15, 1998. Please send curriculum vitae and the names of two references to: Dr. Ronda Rolfes, Department of Biology, Box 571229, Georgetown University, Washington, DC 20057-1229. For inquiries, please contact either Dr. Rolfes at Telephone: 202-687-5881; e-mail: rolfesr@gusun.georgetown.edu, or Dr. Joseph Neale, Department Chair at Telephone: 202-687-6247.

ASSISTANT PROFESSOR MARINE/AQUATIC INVERTEBRATE ZOOLOGIST

Tenure-track position starting fall 1998. Ph.D., evidence of teaching and research excellence required. Responsibilities include introductory and upper-level undergraduate biology courses, scholarly professional activities, and sponsoring undergraduate research. Send curriculum vitae, official transcripts, and three letters of reference by December 31, 1997, to: Dr. Paul Grecay, Chair, Invertebrate Zoologist Search Committee, Department of Biological Sciences, Salisbury State University, Salisbury, MD 21801. Salisbury State University is an Equal Opportunity Employer. Qualified women, minorities, and disabled persons are encouraged to apply.

POSTDOCTORAL POSITIONS available in allergy and inflammation research laboratory to study a new receptor-mediated pathway for inhibition of mast cell activation (PNAS 93:10809; J. Immunol. 158:5065). Candidates should have a strong background in signal transduction and/or molecular biology, preferably with experience in mammalian cell transfection, transgenic technology, and/or RNA transcription regulation. Send curriculum vitae and contact information for three references to: Howard R. Katz, Ph.D., Harvard Medical School/Brigham & Women's Hospital, Division of Rheumatology, Immunology, and Allergy, Smith Building, Room 638A, 75 Francis Street, Boston, MA 02115. E-mail: hrkatz@mbcrr.harvard.edu.

POSITIONS OPEN

ELON COLLEGE BIOLOGY DEPARTMENT

Applications are invited for a permanent, full-time position as ASSISTANT PROFESSOR of biology starting in August, 1998. Applicants must have a Ph.D. degree in the biological sciences with expertise in vertebrate biology including field work. Evidence of excellence in teaching and continuing scholarship are required. A minimum of three years of teaching experience is preferred. Teaching responsibilities may include comparative vertebrate anatomy, vertebrate physiology, environmental studies courses, freshman biology, and biology for non-majors. Interdisciplinary teaching and research are encouraged. Applications should be submitted by January 12, 1998. Send letter of application, résumé, statements of teaching philosophy and research goals, copies of transcripts, and three letters of support to: Dr. Rosalind Reichard, Dean of Sciences and Mathematics, 2163 Campus Box, Elon College, NC 27244. Minority and women candidates are encouraged to apply. Elon is an Equal Opportunity Employer institution

CALIFORNIA LUTHERN UNIVERSITY FLETCHER JONES ENDOWED CHAIR IN BIOLOGY

California Lutheran University invites applications for the newly established Fletcher Jones Chair in Biology endowed by the Fletcher Jones Foundation and to begin in the fall of 1998. The University seeks applicants in the field of developmental biology with strengths in genetics, biochemistry, molecular biology, or cell biology. The appointment will be made at the ASSOCIATE or FULL PROFESSOR level. Demonstrated excellence in undergraduate teaching and in research is required. Responsibilities include teaching one course with laboratory each semester, directing the Senior Research program, and sustaining a personal program of research involving undergraduates. Send letter of application, curriculum vitae, and names of references to: Dr. Pamela Jolicoeur, Provost, California Lutheran University, 60 West Olsen Road, Thousand Oaks, CA 91360. Review of applicants will begin on Decmeber 1 and continue until the position is filled. Equal Opportunity Employer.

The University of Wyoming invites applications for a nine-month tenure-track ASSISTANT/ASSOCIATE PROFESSOR in geographic information sciences (GIS).

Qualifications: A Ph.D. in geographic information sciences, geography, or closely related field; prior evidence of successful classroom teaching, a developing research program in the area of GIS or in the application of GIS to other disciplines; a commitment to developing a GIS curriculum in an interdisciplinary environment.

Applicants should submit: A letter of application, a current curriculum vitae, names and contact information for three references, academic transcripts, and appropriate supporting statements regarding teaching and research goals to: Tom Buchanan, Associate Provost, Academic Affairs, 301 Old Main, P.O. Box 3302, University Station Laramie, WY 82071-3302.

Closing date: Screening will begin on December 1, 1997, and will continue until the position is filled.

Persons seeking admission, employment, or access to programs of the University of Wyoming shall be considered without regard to race, color, national origin, sex, age, religion, political belief, disability, or veteran status.

NEUROPHYSIOLOGY

Tenure-track ASSISTANT PROFESSOR in biology with specialty in neurophysiology beginning 1 September 1998. Ph.D. required; postdoctoral and teaching experience desirable. Responsibilities: share in teaching human physiology, animal physiology, introductory biology, and develop a research and teaching program in neurophysiology; pursue extramural funding, and supervise M.S. theses. Letter of application, brief statements of teaching philosophy and research interests, curriculum vitae, reprints, three letters of recommendation, and transcripts to: Chair, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901. Telephone: 920-424-1102; FAX: 920-424-1101; e-mail: drecktra@uwosh.edu by 9 January 1998. The University of Wisconsin Oshkosh is an Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

VASCULAR PHYSIOLOGIST ASSISTANT/ASSOCIATE PROFESSOR TENURE-TRACK

Applications are solicited for a Vascular Physiologist to complement existing research programs in vascular smooth muscle regulation and endothelial cell physiology. Preference will be given to applicants with demonstrated productivity as evidenced by peer-reviewed publications and extramural funding and interest in signal transduction, ion channels, and gene expression relevant to vessel tone in vascular tissue. Minimum qualifications include M.D. and/or Ph.D. degree and relevant postdoctoral training. For best consideration, candidates should submit a curriculum vitae, a short description of research program, and the names of three references by January 9, 1997, to: Benjimen R. Walker, Ph.D., Department of Cell Biology and Physiology, University of New Mexico School of Medicine, Albuquerque, NM 87131. University of New Mexico is an Equal Opportunity/Affimative Action Employer.

ASSISTANT PROFESSOR. The Department of Physiology invites applications from outstanding scientists with Ph.D., M.D., or equivalent degrees for two tenure-track Assistant Professor positions. Of particular interest are candidates who will develop independent research programs in cellular, molecular, or biophysical aspects of contractility, motility, or cell signaling. Integrative biology research using cell and molecular biological approaches to investigate higher order physiological systems is also of primary interest. However, the excellence of the successful candidates is more important than the particular area of research. These positions are part of the continuing growth of this dynamic Department and will be supported by exceptional start-up packages. Applicants should submit a curriculum vitae, a brief statement of research plans, and arrange to have three letters of reference sent to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. An Affirmative Action/Equal Opportunity Employer.

The Gertrude H. Sergievsky Center of Columbia University, a research center devoted to epidemiologic investigation of neurodevelopmental disorders throughout the life span, seeks applications for a MOLECULAR BIOLOGIST at the ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR level. A doctorate (Ph.D./ Dr.PH./D.Sc.) in molecular biology, molecular genetics, or the equivalent, or an M.D. with equivalent postgraduate training is required. The successful applicant must have demonstrated evidence of high productivity, ability to obtain independent research funding, and enthusiasm for collaborating with an active group in basic and applied research on the molecular bases of neurodevelopmental and neurodegenerative disorders. Send letter of interest and curriculum vitae with the names of three referees to: Dr. Ruth Ottman, Sergievsky Center, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity Employer and encourages applications from qualified women and minorities.

ASSISTANT PROFESSOR (tenure-track). Environmental science. Successful candidate will hold Ph.D. at time of appointment in field related to environmental science, have expertise in environmental policy/law/regulation, and have commitment to fostering diversity. Appointment to a department within the College of Science and Technology in August 1998. Experience preferred in postdoctoral/government/industry, scholarly activity/ professional communications, extramural funding/project management, and teaching/personnel management. Send letter of application, curriculum vitae, statements of teaching philosophy and research interests, transcripts, and three reference letters to: Dr. Stephen Overmann, Department of Biology, Southeast Missouri State University, Cape Girardeau, MO 63701 by February 13, 1998. An Equal Opportunity/Affirmative Action Employer/ Minorities / Females

Biology. Two ASSISTANT PROFESSORS, August 1998. BOTANIST to teach plant biology, aquatic ecology. VERTEBRATE PHYSIOLOGIST to teach animal biology, human anatomy/physiology. Both require Ph.D. and strong commitment to undergraduate teaching and research. Priority deadline January 19, 1998. Send inquiry to: Chair, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004. E-mail: biolsrch@uwec.edu; Telephone: 715-836-4166. FAX: 715-836-5089. Equal Opportunity/Affirmative Action Employer.

Smithgall Institute Chair in Molecular Cell Biology

Georgia Institute of Technology

The School of Biology at Georgia Tech invites nominations and applications for a new endowed chair in molecular cell biology. We are seeking candidates who have achieved international prominence in an area of molecular cell biology with emphasis on gene regulation, cell-cell interaction, or sub-cellular structure. He or she will be expected to conduct a vigorous program of research, and actively participate in the School's undergraduate and graduate teaching programs.

The administration has approved a strategic plan that includes a significant expansion of the biological sciences including several endowed professorships, and new research buildings. Opportunities for collaborative interactions are available through interdisciplinary centers involving faculty in Chemistry and Biochemistry, and the Petit Institute of Bioengineering and Biosciences.

Applications should include a curriculum vitae, names of three references, and a letter describing research and teaching interests. Nominations and applications should be sent to:

Smithgall Institute Chair Search Committee, College of Sciences, Georgia Institute of Technology, Atlanta, GA 30332.

Georgia Institute of Technology is an Affirmative Action/Equal Opportunity Employer.

George Mason University BIOLOGY

Chair, Department of Biology

George Mason University, Department of Biology seeks nominations and candidates for the Chair of the Department. The department seeks an individual with dynamic leadership capability, an understanding of university citizenship, demonstrated administrative experience, and outstanding credentials. The successful individual will have the vision to lead the department in a college with a new Dean and a university with a new President, both of whom are interested in strong leadership for the future of one of the college's largest departments. The individual who holds the position will have an opportunity to make significant contributions to the development of the direction of the college and the university.

Candidates should be able to promote academic excellence within the department, increase the current level of external funding, and promote interdisciplinary initiatives with other academic units within the college, the Institutes for Biosciences, Bioinformatics, and Biotechnology, the Institute for Computational Sciences and Informatics, the Krasnow Institute, and the Institute for Public Policy.

The department is committed to preparing students with a sound liberal arts curriculum with substantial experience in quantitative and analytical thought along with preparation for a related profession. It has 30 full-time faculty and offers a B.A. and B.S. degrees in Biology, B.S. in Medical Technology, a M.S. degree in Biology, and a Ph.D. in Environmental Science and Public Policy.

George Mason University is the state university for northern Virginia and is located in the metropolitan Washington DC area and has an approximate enrollment of 24,000. The University's and Department's Homepage addresses are http://www.gmu.edu/and http://www.gmu.edu/Biology.

Applicants should send a letter of interest in the position, a curriculum vitae, and the names of three references (references will not be contacted without permission from the applicant). Nominators should send a letter and a copy of the vitae of the nominee. Send materials to:

Chair, Search Committee Department of Biology George Mason University 4400 University Drive Farifax, VA 22030-4444

The search committee will begin a review of applications on December 15, 1997, and continue until the position is filled. George Mason University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

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Tenure-Track Faculty Positions Department of Psychiatry University of Wisconsin Medical School Madison, WI

The Department of Psychiatry at the University of Wisconsin supports outstanding research programs in the areas of affective neuroscience and developmental psychobiology as they relate to understanding the development of psychopathology. Further development of these initiatives are underway and will include the addition of faculty representing the areas of functional brain imaging and molecular behavioral neuroscience. In addition, the UW campus recently established the HealthEmotions Research Institute to scientifically determine how emotions influence health.

NEUROIMAGING

A clinician-scientist at the level of assistant professor is sought who uses innovative functional brain imaging techniques to study emotion and psychopathology to work in collaboration with other Institute investigators. State-of-the-art fMRI and PET equipment are available through the HealthEmotions Research Institute. Minimum qualifications include an M.D./Ph.D. in Psychiatry, Radiology, or other appropriate specialty. A history or research excellence is required along with the ability to translate knowledge into patient settings through a limited clinical practice.

MOLECULAR BEHAVIORAL NEUROSCIENTIST

A Scientist at the level of assistant professor is sought to develop a research program to understand molecular mechanisms of psychiatric illness and/or responses to psychopharmacologic treatments. The successful candidate will be expected to interact with the Department's HealthEmotions Research Institute in the study of emotion, mind/body interaction, and early developmental impacts of stress modeled both *in vitro* and with animal (including primate) models. The focus of the work will be to investigate molecular mechanisms underlying the development of psychopathology and/or mechanisms underlying psychopharmacologic treatment. Minimum qualifications include a Ph.D. or M.D./Ph.D. in a relevant discipline with 3 years of demonstrated laboratory experience and ability to secure extramural funding.

Madison is consistently rated among the top ten U.S. cities in which to live. The University's tradition of excellence in research and collaboration across schools and departments creates a rewarding environment for the advancement of science.

For more information, please contact:

Ned Kalin, M.D., Chair and Hedberg Professor of Mind and Health Director, HealthEmotions Research Institute University of Wisconsin Department of Psychiatry 6001 Research Park Boulevard Madison, WI 53719-1179

University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

PROTEIN CHEMIST ASSISTANT OR ASSOCIATE PROFESSOR VIRGINIA COMMONWEALTH UNIVERSITY Department of Biochemistry and Molecular Biophysics \$40,000 to \$70,000

The Department is seeking an excellent Protein Chemist. This is a tenure-track appointment at the Assistant or Associate Professor level. Applicants must hold the Ph.D. degree and have had at least two years of postdoctoral experience. The successful candidate will have already developed a strong, independent research program in a field requiring protein chemistry skills, and have obtained extramural funding. The successful candidate is expected to continue an excellent research program, train gradute students, collaborate with colleagues, and participate in the teaching programs of the department. Applicants should send a curriculum vitae, statement of research interests and future plans, and have three letters of recommendation sent, before January 1, 1998, to:

Chairman, Search Committee
Position No. F 5413
Department of Biochemistry and
Molecular Biophysics
P.O. Box 980614
Virginia Commonwealth University
Richmond, VA 23298-0614

Vinginia Commonwealth University is an Equal Opportunity/ Affirmative Action Employer. Women, minorities, and persons with disability are encouraged to apply.

ORGANISMAL VASCULAR PLANT BIOLO-

GIST, tenure-track position beginning September 1998. Villanova University seeks a broadly trained Biologist with a specialization in organismal vascular plant biologist to fill a tenure-track position at the ASSISTANT PROFESSOR level. The successful candidate will be expected to develop both graduate (M.S./M.A.) and undergraduate courses in his or her area of specialization, participate

ate courses in his or her area of specialization, participate in other existing courses in the department, direct graduate and undergraduate research, and participate in Departmental and University activities. Candidates should have postdoctoral experience, a record of productive research, and be motivated to obtain extramural funding. For further information see website: www.bio.vill.edu.

Villanova University is a Roman Catholic university founded by and currently related to Augustinian Order. Candidates must be committed to a career of scholarly research and publication, service, and, above all, excellent undergraduate teaching.

Submit letter of application, curriculum vitae, statements of teaching philosophy and research interests, undergraduate and graduate transcripts, and have three leters of recommendation sent to: Plant Biologist Search Committee, Department of Biology, Villanova University, Villanova, PA 19085-1699.

To ensure full consideration, materials should be received by December 15, 1997.

An Affirmative Action/Equal Opportunity Employer, Villanova is committed to fostering a faculty rich in diversity and dedicated to Villanova's Judaco-Christian value orientation.

RESEARCH ASSOCIATE

Swiss Reinsurance America Corporation, located in Midtown Manhattan, relocating to Westchester in early 1999, has a challenging opportunity for a highly qualified individual to help its Research and Development Department fulfill its mission to investigate and mitigate potential risks for the insurance/reinsurance business.

The focus of your efforts will be to help identify potential risks to our business, analyze them, and reduce exposure to losses or prevent them and provide other value-added services to our internal and external clients.

The ideal candidate will have a scientific background; a Master's degree in biochemistry, toxicology, life sciences, or environmental sciences is preferred. Effective presentation and writing skills and experience in designing research studies are also essential. Possible candidates will be creative thinkers who can collaborate with management at all levels and are enthusiastic about driving sustainable development based on market approaches. Two years of experience in risk management is a plus.

We offer the impresssive resources of an industry leader, ample support, and a competitive compensation package. For immediate consideration, send résumé to: Swiss Reinsurance America Corporation, Human Resources Department, 237 Park Avenue, New York, NY 10017. We are an Equal Opportunity Employer.

POSITIONS OPEN

ECOLOGIST OR EVOLUTIONARY DEVELOPMENTAL BIOLOGIST WASHINGTON UNIVERSITY

The Department of Biology invites applications for a tenure-track appointment to begin in the fall of 1998. The candidate is expected to develop, or have developed, an active research program in any area of ecology (e.g., community, ecosystem, microbial, physiological, population) or in any area at the interface of evolutionary and developmental biology, and to teach at the undergraduate and graduate levels. Primary consideration will be given to applicants at the ASSISTANT PROFESSOR level, but more SENIOR candidates with distinguished records of scholarship will be considered. Candidates must have a Ph.D. degree, postdoctoral experience, evidence of significant research accomplishments, and a commitment to excellence in teaching. Letters of application should be accompanied by a curriculum vitae, brief statements of research and teaching interests, and reprints of three selected papers. Applicants should also arrange to have three letters of recommendation sent to:

Jonathan B. Losos
Chair, Faculty Search Committee
Department of Biology
Campus Box 1137
Washington University
1 Brookings Drive
St. Louis, MO 63130-4899

All applications should be received by January 1, 1998. Washington University is an Affirmative Action/Equal Opportunity Employer.

CELL BIOLOGY

The Department of Biology at the University of Central Florida invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level starting August 1998. We are particularly interested in individuals using molecular cell biological approaches in animal or plant systems. However, any contemporary area of animal or plant cell biology will be considered. A Ph.D. and a minimum of two to three years of postdoctoral experience are required. The successful candidate will develop a research program that can attract extramural funding, direct graduate student research, and participate in undergraduate and graduate teaching in cell biology. The University of Central Florida is committed to a major expansion in the biological sciences, including in the next three years a multidisciplinary Ph.D. program in the biomolecular sciences, and a new 50,000 square feet addition to the Biology building. Candidates should submit a curriculum vitae, three letters of recommendation, and statements of research and teaching interests. All materials must be postmarked by December 15th, 1997. Send material to: David T. Kuhn, Search Committee Chair, Department of Biology, University of Central Florida, 4000 Central Florida Boulevard, Orlando, FL 32816-2368. The University of Central Florida is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. As an agency of the State of Florida, all application materials and selection procedures are available for public

The Department of Microbiology and Immunology and the Center for Excellence in Cancer Research, Treat ment, and Education at Louisiana State University Medical Center invite applications for a tenure-track position at the ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR level. Applicants for the rank of Associate Professor or Professor must have a record of national research funding. The successful candidate must establish a strong, independent research program that focuses on an area of cancer research such as oncogenes, tumor suppressors, cell cycle control, mechanisms of carcinogenesis, tumor biology, virology, immu-nology, etc. Responsibilities include teaching medical and graduate students and participation in the training of the 40 departmental doctoral and postdoctoral students. The Cancer Center promotes research and interactions among basic and clinical faculty members in a variety of disciplines. Start-up funds, research incentive plan, and excellent facilities are offered. Applicants should submit a curriculum vitae, description of research support and ongoing research, and three letters of reference to: Dennis J. O'Callaghan, Ph.D., Professor and Head, Department of Microbiology and Immunology, Louisiana State University Medical Center, 1501 Kings Highway, Shreveport, LA 71130. LSU Medical Center is an Affirmative Action Employer,

POSITIONS OPEN

ANIMAL DEVELOPMENTAL BIOLOGIST. Penn State Abington, Abington College, a suburb of Philadelphia, seeks an Animal Developmental Biologist for a tenure-track position at the **ASSISTANT PRO**-**FESSOR** level beginning August 1, 1998. Applicants must have a Ph.D. degree and prior teaching experience at the college/university level. Experience with computerbased teaching and laboratory experimentation, and multimedia instruction are preferred. Position responsibilities include: (1) teaching upper-level courses in: developmental biology, embryology, histology, and others in area of expertise; teaching introductory courses for biology majors; teaching non-majors biology courses; (2) establishment of an active research program using current techniques that will involve undergraduates; and (3) active participation in departmental and university service, and undergraduate advising. Submit by December 15, 1997 (or until suitable candidate is found), an application letter, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation: Dr. Leonard Mustazza, Biology Search, 119 Sutherland Building, Penn State Abington, 1600 Woodland Road, Abington, PA 19001, Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION UNIVERSITY OF WISCONSIN

A Postdoctoral position is available in a laboratory investigating autoimmune disease and immune properties of cerebral microvessels. Applicant must have documented experience in molecular techniques and experience in tissue culture and a wide variety of immunologic techniques is highly desirable. The research will focus on the immunologic properties of vascular smooth muscle and endothelium and the interactions of these two cells. Funding is available for up to four years and salary will be linked to experience. Please send curriculum vitae, cover letter explaining background and interest, and names of three references to:

Michael N. Hart, M.D. Department of Pathology 6152 MSC 1300 University Avenue Madison, WI 53706

The University of Wisconsin' is an Equal Opportunity/Affirmative Action Employer and as such women and minorities are encouraged to apply. Unless confidentiality is requested in writing information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

SCIENTIST

The Division of Endocrinology, Department of Medicine, University of Toronto is seeking to recruit Scientists and/or Clinician-Scientists at the ASSISTANT PROFESSOR level, to establish independent research programs in the molecular and cellular biology of diabetes and/or atherosclerosis. Candidates should have a record of successful graduate and postdoctoral training, as evidenced by a competitive publication record, and should be eligible to compete for a MRC Scholarship Award.

Interested applicants should submit a covering letter and curriculum vitae by January 1 to: Dr. D. Drucker, The Toronto Hospital, 200 Elizabeth Street CCRW 3-838, Toronto M5G 2C4 Canada. E-mail: ddrucker@utoronto.ca.

The University of Toronto encourages applications from qualified men and women, members of visible minorities, aboriginal peoples, and persons with disability. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

PHYSICAL CHEMISTRY, BIOPHYSICS, AND PHYSICS EXPERIMENTALISTS AND THEORISTS POSTDOCTORAL AND RESEARCH FACULTY

The Wilson group, at the University of California, San Diego, Department of Chemistry and Biochemistry, has positions available for exceptionally talented Scientists in the following areas: ultrafast X-ray diffraction and absorption applied to chemical and biochemical dynamics and function, dynamics of biomolecular and biological processes (including interneuronal communication and function) imaged using ultrafast microscopy, and theoretical studies related to these areas. For more information about these positions and the group, or to receive application process information, visit our website: http://wwwwilson.ucsd.edu or e-mail: wgjobops@ucsd.edu. Positions commensurate with experience and qualifications, with salaries based on University of California payscales.

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Select SCIENCE Professional Network from the menu Expand your career in the growing Pharmaceutical Research Division of Parke-Davis while enjoying more scientific opportunity and the freedom to explore. Our Molecular Toxicology Group within the Department of Pathology and Experimental Toxicology has immediate openings for a Scientist/Senior Scientist and an Associate Scientist to join our team in Ann Arbor, MI.

SCIENTIST/SENIOR SCIENTIST

While managing in vivo genetic toxicology studies conducted with drugs in development, you will participate in scientific leadership of research projects in the area of in vivo genotoxicity. A Ph.D. in Toxicology, Pathology, Pharmacology, Genetics or related field is required and experience in contempo-

rary cytogenetics is essential. You'll work independently in the design, conduct and interpreta-

tion of experiments while being able to collaborate ideas in a team environment. Familiarity with molecular techniques as applied to chromosome damage as well as the use of transgenic animal models in assessing genotoxicity is preferred. Job Code: CJM-97362

THE FIELD OF TOXICOLOGY IS WIDE OPEN AT PARKE-DAVIS

ASSOCIATE SCIENTIST

You'll participate in the study of molecular mechanisms of genotoxic and tumorigenic effects of drugs, as well as assist in the conduct of genetic toxicology safety studies. An MS in Molecular/Cell Biology, Biochemistry or related field and 2 or more years of research experience are required. A working knowledge of basic molecular/cell biology and biochemistry techniques is required. This knowledge will include tissue culture, general cell- and non

cell-based biochemical assays (e.g., enzyme assays, spectrophotometry, RIA, ELISA), DNA/RNA/protein manipulations and analysis (e.g. RT-PCR, sequencing, Northern, Southern and Western blotting) as it applies to the study of gene expression, signal transduction and cellular metabolism and function. Basic computer literacy is a must; familiarity with analytical chemistry techniques (e.g., HPLC) is a plus. Job Code: CJM-97370

Qualified candidates mail, fax or e-mail your resume*, indicating the Job Code of interest, to: Parke-Davis Pharmaceutical Research, Human Resources Department, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (313) 998-3394. E-mail: resume@aa.wl.com

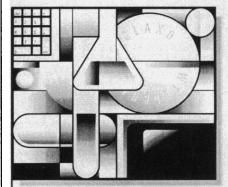
*Submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.

Equal opportunity in action. Smoke-free work environment.



Pharmaceutica

There's Excitement In The Journey



We're Breaking New Ground in Research & Development

Glaxo Wellcome, one of the world's largest pharmaceutical companies, is an organization committed to fighting disease and bringing innovative medicines to patients throughout the world. To accomplish this feat, we are on a constant journey of discovery — a journey fueled by consummate professionals dedicated to significant medical advances which improve the quality of life. If you would like to share our journey while testing the limits of your own potential, join us in the following opening at our Corporate Headquarters located in Research Triangle Park, N.C.

ASSOCIATE SCIENTIST Functional Genetics

Selected individual will design and perform experiments to localize and quantitate RNA and proteins in cells and tissues using various in situ hybridization and protein localization techniques.

This position requires a BA/BS in Cell or Molecular Biology, or a related field, with a minimum of 2 years relevant experience. Prior experience in in situ hybridization, immunocytochemistry, and basic molecular biology techniques is required. Experience in various microscopic imaging techniques is highly preferred. Candidate must have excellent communication skills with the ability to work effectively in a team setting.

In exchange for your considerable skills, we offer an excellent salary and benefits package and the opportunity for career growth. For confidential consideration, send your resume, which must include position title and salary history to: Human Resources Department, Job# ASC4292-2, Glaxo Wellcome, P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please). An Equal Opportunity Employer M/F/D/V.

GlaxoWellcome

You'll Learn, You'll Create, You'll Discover

PRODIGENE

A world leader in expression and purification of recombinant proteins in plants invites applicants for full-time positions. All candidates should be highly motivated, possess excellent communication skills, and desire to work in a high performance environment with multidisciplinary teams. All candidates will need to have excellent skills in project management and in interactions with people.

MOLECULAR BIOLOGIST

Responsibilities will include hands-on gene construction for specific projects and advancement of the technology to express recombinant proteins in plants. A Ph.D. or equivalent in molecular biology or biochemistry with experience in gene construction techniques is required. Experience with gene expression systems is preferred.

CELL BIOLOGIST

Responsibilities will include hands-on transformation of plants with specific constructs and advancement of tranformation technology, as well as other aspects of expression in plants. A Ph.D. or equivalent in cell biology or biology with experience in transformation is required. Experience with Agrobacterium is highly desirable.

PROTEIN BIOCHEMIST

Responsibilities will include hands-on analysis and development of assays for specific proteins, as well as purification and characterization of these proteins. A Ph.D. or equivalent in biochemistry with experience in protein purification and characterization is essential

Please send a letter of interest and curriculum vitae to:

Lisa Baker **ProdiGene** 1500 Research Parkway, Suite 220 College Station, TX 77845

RUTGERS UNIVERSITY-NEWARK

Applications are invited for two tenure-track faculty positions in the Department of Biological Sciences. Successful candidates are expected to develop and maintain active research programs and to teach on both the graduate and undergraduate levels.

PHYSIOLOGICAL ECOLOGIST. An Ecologist with a focus on physiological processes as they affect bi-otic interactions from the individual to the community levels. We are particularly interested in individuals with interdisciplinary research interests, such as restoration

ecology or conservation ecology.

CELL BIOLOGIST. A Cell Biologist to complement interdisciplinary research programs in protein sorting, ion transport, and cell motility. The successful candidate will have the opportunity to participate in the NSF-sponsored program in cellular and molecular biodynamics.

Applications will be reviewed beginning December 15, 1997. Send curriculum vitae and three letters of recommendation to: Dr. Edward G. Kirby, Chairman, Department of Biological Sciences, Rutgers University, 101 Warren Street, University Heights, Newark, NJ 07102. Website: http://silk.rutgers.edu/. Rutgers University is an Equal Opportunity Employer.

The Children's Hospital of Philadelphia, the nation's first hospital dedicated solely to pediatric care, currently has an opening for a:

POSTDOCTORAL FELLOW

The candidate we seek will study vitamin-K dependent coagulation factors in collaboration with the University of Pennsylvania. Work will focus on probing intermolecular interactions of serine proteases with their cofactors, sub-strates, and inhibitors through the study of mutant recombinant proteins. The candidate should be a recent Ph.D. with background in molecular biology and biochemistry with an emphasis on enzyme kinetics. Send or e-mail curriculum vitae to: Dr. Katherine High, 310A Abramson Research Center, The Children's Hospital of Philadelphia, 324 South 34th Street, Philadelphia, PA 19104. E-mail: high@email.chop.edu. An Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITIONS in molecular biology and nucleic acid chemistry at the Laboratory for Molecular Science of the University of Southern California. Basic interdisciplinary research related to the construction of a molecular computer (L. Adleman, "Molecular computation of solutions to combinatorial problems," Science 266:1021–1024, November 11, 1994). Research directed by Professors Leonard Adleman and Myron Goodman. Please submit three letters of reference and curriculum vitae to: Dr. Nickolas Chelyapov, University of Southern California/Molecular Biology—ACB 530, 835 West 37th Street, Los Angeles, CA 90089-1340.

POSITIONS OPEN



PIONEER. Pioneer Hi-Bred Production Ltd., a subsidiary of Pioneer Hi-Bred International, Inc., would like to recruit a **PRODUCT DEVELOPMENT MANAG**-ER. The successful candidate will plan and conduct comprehensive research programs to increase quantitative genetic gain and integrate crop protection and grain traits into Pioneer corn germplasm for the purpose of developing enhanced value products.

Qualifications: Ph.D., or equivalent, in plant breeding, genetics, or related field with a strong background in molecular and whole plant genetics and supporting

Competencies and experiences desired: Minimum of three to five years of research experience in product development efforts.

Please submit résumé by November 10, 1997, to:

Rose Bertino, C.H.R.P., Human Resources Manager Pioneer Hi-Bred Limited P.O. Box 730 Chatham, Ontario N7M 5L1 Canada FAX: 519-380-2000

CHAIR SCHOOL OF BIOLOGICAL SCIENCES EASTERN ILLINOIS UNIVERSITY

Eastern Illinois University invites applications and nominations for Chair of the School of Biological Sciencees. The Chair as Chief Administrative Officer has responsibility for faculty and staff recruitment and evaluation and management of budget. Successful candidate will have Ph.D. in an area of biological sciences and strong record of teaching, research, and administrative accomplishments. Appointment date is July 1, 1998.

The School of Biological Sciences (created from the Departments of Botany and Zoology and Environmental Biology Program) has 33 faculty, approximately 650 undergraduate majors, and 30 Master's students. More information about Eastern Illinois University can be found at website: www.eiu.edu.

Application deadline is January 12, 1998, to receive full consideration. Send letter of application, concise statement of administrative philosophy, full curriculum vitae and names/addresses/telephone numbers/e-mail of four references to: Prof. Ebrahim Karbassioon, Chair, Biological Sciences Search Committee, Department of Economics, Eastern Illinois University, Charleston, IL 61920. E-mail: cfexk@eiu.edu. Affirmative Action/ Equal Access/Equal Employment Opportunity.

POSTDOCTORAL POSITION IN CARDIAC MOLECULAR BIOLOGY/GENE THERAPY

Immediate opening to study mechanisms of cardiac differentiation, transcriptional regulation, and activation of cardiac genes in non-muscle cells. Candidates should ideally have experience in either muscle molecular biology or viral gene transfer. Submit curriculum vitae, research interest/career plans, and three references es to: Charles E. Murry, M.D., Ph.D., Department of Pathology, Box 357470, University of Washington, Seattle, WA 98195. FAX: 206-543-3644; email: murry@u.washington.edu.

POSTDOCTORAL POSITION

A NIH grant-funded Postdoctoral position is available immediately to study the molecular recognition of T cell receptors and its MHC/peptide ligand at Harvard Medical School and Dana Farber Cancer Institute. Experience in cell and molecular biology is essential, training in immunology is preferred. Please send a curriculum vitae, publications, and a list of three references to: Dr. Hsiu-Ching Chang, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3351; e-mail: hsiu-ching_chang@dfci.harvard.edu.

POSTDOCTORAL POSITION to study central nervous system remyelination. In vivo and in vitro cellular and molecular techniques will be integrated to identify signals mediating proliferation and migration of remyelinating cells in experimentally demyelinated mice in the laboratory of Dr. Regina C. Armstrong. Send curriculum vitae to: Henry M. Jackson Foundation, Human Resources Department, Attn: PL2970403, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. Email: hr@mail.hjf.org. Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY/PHYSIOLOGY

The Division of Pharmaceutical Sciences at the University of Cincinnati, College of Pharmacy invites applications for a tenure-track faculty position from individuals with a Ph.D. degree in pharmacology, physiology, or a related biological science. The successful candidate will establish an independent research program in a relevant field and will teach an introductory anatomy/physiology course as well as participate in graduate education. A full description of the position and the method for application can be found at website: http:// inpharmatics.uc.edu/job.html. Application letters, curriculum vitae, statement of research plan, and the names and addresses of three references should be sent to: Gary A. Gudelsky, Ph.D., Search Committee, University of Cincinnati, College of Pharmacy, 3223 Eden Avenue, Cincinnati, OH 45267. In order to assure consideration, application materials should be received by February 2, 1998. University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available to investigate virulence mechanisms of Haemophilus ducreyi, the etiologic agent of chancroid. Emphasis will be placed on genetic analysis of bacterial products involved in the formation of genital ulcers, especially toxins (see *PNAS* **94**: 4056, 1997) and other bacterial factors that interact directly with the host environment. Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Position includes salary, fringe benefits, and the opportunity to work in a dynamic re-search environment. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw. swmed.edu. University of Texas Southwestern is an Equal Opportunity/Affirmative Action Employer.

RESEARCH FELLOW MOLECULAR BIOLOGY/NEUROSCIENCE

A funded position is available immediately for a motivated Ph.D. or M.D. to join a newly developed program in gene therapy for Parkinson's disease at Staten Island University Hospital (website: www.siuh.edu). SIUH is an academic medical center centrally located in one of the boroughs of New York City. Previous experience in the ex vivo manipulation and cellular engineering of human cells, gene expression systems, transfection, transduction, and rat models of Parkinson's disease preferred.

Please send curriculum vitae and names of three references to: PD Search Committee, c/o Dr. Roberta Hayes, Staten Island University Hospital, Nalitt Institute for Cancer, 256 Mason Avenue, Staten Island, NY 10305. FAX: 718-226-6467; e-mail: 104717. 3066@compuserve.com. Equal Opportunity Employer.

POSTDOCTORAL POSITION available for basic work on the protein folding problem. Research involves using new experimental results to investigate ability of amino acids to form secondary structures. Starting date is after December 20, and is flexible. Ph.D. and computer skills required; experience with experimental instrumentation desirable. For full consideration apply by December 8; position shall remain open until filled. Send curriculum vitae and arrange for three letters of reference to be sent to: Prof. W. Curtis Johnson, Biochemistry and Biophysics, 2011 ALS, Oregon State University, Corvallis, OR 97331-7305. Telephone: 541-737-4143. OSU is an Affirmative Action/Equal Employment Opportunity Employer and responsive to dual-career needs.

ELECTRONIC PUBLISHING COLD SPRING HARBOR LABORATORY

Cold Spring Harbor Laboratory Press seeks an individual to coordinate and develop the potential of online publishing of research journals, books, and multimedia products. Web authoring skills are essential, programming/database experience helpful. Research experience in cell or molecular biology required. Position is open immediately. Please send letter of application and résumé Press, 1 Bungtown Road, Cold Spring Harbor, NY 11724. FAX: 516-367-6857; e-mail: inglis@cshl.org. Equal Opportunity Employer.



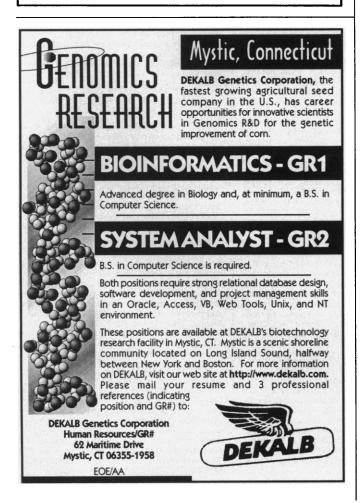


POSTDOCTORAL POSITIONS

Two postdoctoral positions are available immediately in the Laboratory of Biochemistry, National Cancer Institute, National Institutes of Health, to study protein folding pathways and to design new proteins. The first position requires a background in biophysics. The second position requires a background in molecular biology. The projects will involve phage display, site-directed mutagenesis, multidimensional NMR, stopped-flow (CD and Fluorescence), quenchflow, and amide hydrogen exchange. Send curriculum vitae and two letters of recommendation to:

Dr. Yawen Bai
Laboratory of Biochemistry
National Cancer Institute, NIH
Building 37, Room 4A-01
37 Convent Drive MSC4255
Bethesda, MD 20892-4255
E-mail: yawen@valda.nci.nih.gov

NIH is an Equal Opportunity Employer.



GLOBAL CAREER OPPORTUNITIES

INTERNATIONAL VACCINE INSTITUTE APPOINTMENT OF DIRECTOR

The Board of Trustees of IVI is seeking to appoint the Institute's first Director. The Institute is a new international organization that aims to be a center of excellence for research and development work on vaccines against infectious disease, for pre-clinical and clinical evaluation of vaccine candidates, and for related epidemiological studies, with reference to the needs of developing countries, particularly those in Asia. Within the context of the Children's Vaccine Initiative, it will collaborate closely with the World Health Organization (WHO), other relevant international bodies, with national laboratories, and with vaccine producers. Its work is aimed at enabling and enhancing scientific progress towards development of new and improved vaccines of high quality, safety, and efficacy, particularly, but not exclusively, for childhood immunization programs.

The IVI was initially established under the auspices of the United Nations Development Programme. It has received the status of an independent International Organization through an Establishment Agreement signed by 28 countries and WHO. A new purpose-built scientific facility situated in the Research Park of Seoul National University is at the planning stage, and the Institute's activities are being generously supported by the Government of the Republic of Korea.

The Director will be the chief executive officer of the Institute and will be responsible for the overall administration and management of the affairs and funds of the Institute. He or she will be accountable to the Board of Trustees of the IVI and will be responsible for implementing the Board's decisions in directing, conducting, and carrying out activities of the Institute. The Director must be a leader and will have responsibility for selecting key staff, building up laboratory facilities, leading fund raising activities, and directing the Institute's scientific program. He or she will be expected to provide vision and motivation and to be skilled at human relations.

The initial appointment will be for a period of five years with potential for renewal for a further term. Salary will be based on qualifications and accomplishments.

The Directorship is an exceptionally challenging one and requires a proven capacity to provide overall scientific and strategic leadership. Candidates should have substantial scientific experience in one or more aspects of vaccinology, including microbiology, virology, immunology, or epidemiology of infectious diseases. Previous experience in establishing and administering a scientific facility, especially in a multicultural and multidisciplinary environment, would be an advantage.

Enthusiasm for the objective of improving the world's capacity to control infectious disease by vaccination and for contributing to global collaboration is essential.

Applications should be addressed to:

Prof. Barry Bloom
Professor of Microbiology &

Weinstock Professor of Microbiology & Immunology Howard Hughes Medical Institute, Albert Einstein College of Medicine, Forchheimer Bldg. Room 411 1300 Morris Park Avenue

Bronx, NY 10461-1975 U.S.A Phone #: 1-718-430-2221/2889

Fax #: 1-718-904-1473 E-Mail: bloom@aecom.yu.edu

From whom further particulars can be obtained.

Absolute confidentiality will be respected.

CANCER EPIDEMIOLOGIST. The Cancer Research and Treatment Center at the University of New Mexico School of Medicine is seeking a nationally recognized Epidemiologist to head an interactive program in laboratory and population-based cancer epidemiology. This individual will also have the opportunity to direct a well-established SEER registry with a multi-ethnic population and to recruit additional junior faculty. Opportunities exist for interaction with established programs at the Lovelace Respiratory Research Institute and National Laboratories. Applicants must hold an M.D., Ph.D., or equivalent degree and have demonstrated a high level of research productivity and experience in building programs. Expertise and training in molecular epidemiology and cancer epidemiology are highly desirable. Salary and academic rank (ASSOCIATE PROFESSOR or PRO-**FESSOR** level) related to training and experience. *Must be eligible to work in United States*. Applications will be accepted until the position is filled. Submit letter of interest and curriculum vitae to: Larry Kvols, M.D., Director of the Cancer Research and Treatment Center, University of New Mexico School of Medicine, 900 Camino de Salud, Room 208, Albuquerque, NM 87131-5636. Affirmative Action/Equal Opportunity Participant.

RESEARCH ASSOCIATE

NIA/NIH-supported Research Associate position at Case Western Reserve University and the Cleveland VA Medical Center available immediately for a Ph.D. Scientist in the study of aging-related damage to the mitochondrial electron transport chain and its role in enhancing reperfusion-induced myocardial injury. The scientist will work with Dr. Edward J. Lesnefsky in cardiology/medicine and Dr. Charles L. Hoppel in pharmacology. The Research Associate will design, perform, and interpret experiments in concert with the principal investigators. Previous experience in mitochondrial metabolism, aging research, protein modification, or oxidative tissue damage is welcome. Please send curriculum vitae and three references to: Edward J. Lesnefsky, M.D., Cardiology Section/Medical Service 111B(W), Cleveland VA Medical Center, 10701 East Boulevard, Cleveland, OH 44106. Telephone: 216-231-3465; FAX: 216-229-8509. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH PHYSICIST (MRI)

The National Institutes of Health Diagnostic Radiology Department is seeking a full-time MRI Research Physicist to conduct applied research in clinical MRI. Knowledge and experience in fast MR techniques, MR angiography, fMRI, proton spectroscopy, and diffusion imaging are desirable. Candidates must have a strong background in implementing pulse sequences and in image processing as well as strong oral and written communications skills.

as well as strong oral and written communications skills. Departmental equipment consists of two Echospeed 1.5 T Signa Systems with a third 1.5 T unit anticipated. Numerous collaborative opportunities available with extensive research facilities and support staff. Salary up to \$83,992 (Commensurate with training and experience) Special application procedures apply. For more information contact: Alice Owens at Telephone: 301-496-6924. Applications must be received by December 1, 1997. NIH is an Equal Opportunity Employer. U.S. citizenship is required.

VIRAL IMMUNOLOGY/MOLECULAR VIROLOGY

A POSTDOCTORAL/RESEARCH ASSOCIATE position is available immediately to investigate the humoral response to cervical human papillomavirus infection. Position will require cloning, expression of VLPs from baculovirus, and expertise in ELISAs. Please send curriculum vitae and names of three references to: Dr. R. D. Burk, Ullmann Room 515, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP to investigate mechanisms by which human papillomaviruses perturb keratinocyte biology and contribute to carcinogenesis. Studies explore growth factor gene expression and signal transduction, molecular control of differentiation, and carcinogenesis using transgenic mice. Strong experience in molecular biology helpful. Send résumé to: Craig Woodworth, Laboratory of Biology, NCI, Building 37/2A23, 37 Convent Drive, MSC 4255, Bethesda, MD 20892. E-mail: craigd@helix.nih.gov.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

The Department of Neurosurgery has an opening for a **RESEARCH ASSOCIATE** investigating the mechanisms of cytokine/growth factor signaling in gliomas.

Candidates should have a Ph.D. or M.D. degree and two to three years of experience at the postdoctoral level in biochemistry, molecular biology, and animal cell culture.

Send curriculum vitae with bibliography, summary of research experience, goals, and the names, address, and telephone/FAX numbers of three references to:

Timothy Schaefer, Ph.D.
The Department of Neurosurgery
M. D. Anderson Cancer Center
1515 Holcombe Boulevard, Box 64
Houston, TX 77030

Houston, TX 77030

Equal Opportunity/Affirmative Action Employer.

Women and minority candidates are encouraged to apply.

Smoke-free environment.

POSTDOCTORAL POSITION YALE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF INTERNAL MEDICINE

A Postdoctoral position is available at Yale University, Department of Internal Medicine for NMR studies of diabetes. Research will focus on the use of *in vivo* 13C and 31P NMR to study regulation of glucose metabolism in diabetes. Applicants must have a strong background in the area of NMR spectroscopy. Experience using modern animal or clinical NMR systems is desirable. Equipment available includes a 2.1T human system (1m bore), 7T and 4.7T animal systems, and 11.7T and 8.4T analytical systems. 4.7T human system (1m bore) is anticipated in 1998.

FAX or mail curriculum vitae references to: Yale University School of Medicine, Department of Internal Medicine, Attn: Gerald I. Shulman, M.D., Ph.D., P.O. Box 208020, New Haven, CT 06520-8020. FAX: 203-785-6015.

Academia Sinica—Taipei, Institute of Chemistry invites applications for tenure-track positions at the level of ASSISTANT RESEARCH FELLOW or HIGHER. Candidates should have a demonstrated ability and outstanding potential for excellence in research in bio-organic/bio-inorganic chemistry, mass spectrometry, or materials chemistry. A Ph.D. in chemistry or closely related area with postdoctoral experience is essential. Applicants should submit a complete curriculum vitae, a research proposal, reprints of recent publications, and a photocopy of the Ph.D. diploma by December 31, 1997, and arrange to have at least three confidential letters of recommendation on their behalf to: Chair, Search Committee, c/o Dr. Ling-Kang Liu, Institute of Chemistry, Academia Sinica, Taipei, Taiwan 11529, ROC. Telephone: +886-2-7898532; FAX: +886-2-7831237; e-mail: search@chem.sinica.edu.tw; website: http://www.sinica.edu.tw/chem.

POSTDOCTORAL POSITION AT UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Available immediately to use a new secretion reconstitution assay to study mechanisms of regulated secretion in human neutrophils. Current emphasis is on purification and characterization of cytosolic proteins that reconstitute GTP-dependent secretion. Ph.D. and protein purification experience are essential. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Joel D. Ernst, University of California, San Francisco, Box 0868, San Francisco, CA 94143-0868.

POSTDOCTORAL POSITION to examine neurochemistry of pain and analgesia. Ph.D. in biochemistry, high pressure liquid chromatography techniques used primarily to measure neurotransmitters in biological fluids. Neurophysiology and neurpharmacology methodologies learned from Pain Mechanisms Lab investigators. Send curriculum vitae, research interests, and names of three references to: Dr. J. Eisenach, Department of Anesthesiology, Wake Forest University School of Medicine, Winston-Salem, NC 27157. FAX: 910-716-6744; e-mail: eisenach@bgsm.edu. Affinnative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATES. Two positions. MOLECULAR BIOLOGIST, Ph.D. DNA, RNA isolation, probe labeling, in situ hybridization, immunostaining. Western, Northern, Southern analyses. Nuclear run-on, co-immunoprecipitation, gel shift, RT-PCR, cloning, and sequencing methodology. Knowledge of hormone action, molecular carcinogenesis. CELLULAR TOXICOLOGIST, Ph.D. HPLC methodology, steroids, and proteins. Carcinogenesis and tumor biology knowledge useful. Experience in cell culture, cell isolation, and fractionation. Salary negotiable: \$26,000-plus. Send curriculum vitae and names/addresses of three references to: Dr. Jonathan J. Li, Director, Division of Etiology and Prevention of Hormonal Cancers, Kansas Cancer Institute, Room 5008 Robinson, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7312.

One or two POSTDOCTORAL POSITIONS available immediately to study replication and maintenance of the circular EBV chromosome in latently infected human cells. Genetic and molecular approaches will be used to investigate (1) the precise sites of replication initiation at oriP, (2) the cellular proteins responsible for licensing (cell-cycle regulation) of EBV genome replication, and (3) the factors that determine the large initiation zone of EBV. Competitive salary, commensurate with experience. Apply with names and telephone numbers of three references to: Dr. John Yates, Department of Human Genetics, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263. E-mail: yates@sc3101.med.buffalo.edu. Roswell Park is a Minority/Females/Disabled/Veterans Affirmative Action Employer.

CENTER FOR RADIOLOGICAL RESEARCH COLUMBIA UNIVERSITY

POSTDOCTORAL POSITIONS available for: (1) Cell Microscopist to work on an innovative project involving rapid location of growing cells; familiarity with different imaging techniques and software is important; (2) Molecular Biologists to study mechanisms of radiation-induced neoplastic transformation of human cells and checkpoint control in both mammalian cells and yeast. Send curriculum vitae and references for position (1) to: Dr. David Brenner (e-mail: djb3@columbia.edu) and positions (2) to: Dr. Tom K. Hei, Center for Radiological Research, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Postdoctoral position available to study factors involved in adipocyte dedifferentiation and/or apoptosis. Good communication skills and the ability to work well with others essential. Expertise in molecular biology and/or confocal microscopy preferable. The successful candidate will be encouraged to apply for Postdoctoral Fellowships. Please send a curriculum vitae, a list of references, and a brief statement of career goals to: Dr. Ormond A. MacDougald, Department of Physiology, University of Michigan, 1301 East Catherine Road, Ann Arbor, MI 48109-0622. E-mail: macdouga@umich.edu.

POSTDOCTORAL POSITION available January 1998 for research on the function of protein methyltransferases. Experience with protein purification and characterization is required. Experience with HPLC and mammalian cell culture would be an asset. For consideration, send a curriculum vitae and names of two references to: Dr. Dana Aswad, Department of Molecular Biology and Biochemistry, 3205 Bio Sci II, University of California, Irvine, Irvine, CA 92697-3900. Deadline date for applications is December 15th, 1997. The University of Califonia is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL POSITIONS available for biochemists/biophysicists to study (i) molecular mechanisms of the chaperone action of alpha-crystallin and related heat shock proteins and/or (ii) molecular interactions of beta-amyloid protein of Alzheimer's disease. Experience in protein chemistry, protein-protein and/or protein membrane interactions, and biophysical/spectroscopic methods required. Send curriculum vitae to: Dr. W. Surewicz, Department of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106. E-mail: wks3@pop.cwru.edu.

Deputy Director
Office of Science Policy
and Communications
National Institute on Drug Abuse
National Institutes of Health
Department of Health
and Human Services

The National Institute on Drug Abuse (NIDA) invites applications for a Supervisory Health Scientist Administrator, GS-601–15; or Supervisory Medical Officer, GS-602–15 with an annual salary range of \$75,935 to \$98,714. Physicians may also be eligible for a Physicians' Comparability Allowance of up to \$20,000 per year. The position is located in Rockville, Maryland.

The incumbent serves as Deputy Director, Office of Science Policy and Communications (OSPC). As such, is responsible for advising the Director, OSPC, and the Institute Director on: National drug abuse policy, legislation and policy issues affecting institute programs; science planning, coordination, and evaluation; external relations with various Institute constituencies; communication of program information; and community, professional education, and international affairs. Participates in the development and implementation of science-based strategic planning and policy processes for NIDA. Conducts and oversees analyses of new and existing key policy issues related to drug abuse and addiction, including research training, basic biological and behavioral research, prevention, treatment research including pharmacotherapy and health services research. Directs the establishment of forums to stimulate the discussion and exchange of information on critical drug abuse areas. In addition, the incumbent assists the Director, OSPC, in planning and directing the activities of the Office and participates with the Institute Director and other senior officials formulating Institute goals, objectives, and strategies.

Qualification requirements include the following: a Ph.D. or equivalent doctoral degree in an academic field pertinent to the health sciences, a Doctor of Medicine or Osteopathy degree from a school in the U.S. or Canada, or a Master's Degree in a pertinent health or social science; a professional background in the scientific areas of biological and/or behavioral science; and knowledge of research methodology.

NIDA job vacancies are posted on the NIDA website: http://www.nida.nih.gov/employment.html.

Detailed information is provided under vacancy announcement number DA-97-51. To request a copy, please call the NIDA Job Line at (301) 443-9663 or the NIDA Personnel Office at (301) 445-9593.

Applications must be submitted to:

MANAGEMENT ANALYSIS AND SERVICE BRANCH NATIONAL INSTITUTE ON DRUG ABUSE 5600 FISHERS LANE, ROOM 10A-03 ROCKVILLE, MD 20857 ATTN: EARLE STALFORT

NIH is an Equal Opportunity Employer.
This position is included in the Federal
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targeted to EEO recruitment efforts.
Applications must be postmarked
by December 12,1997.
U.S. citizenship is required.

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Postdoctoral Fellow Positions Research & Development (4 Positions Available)

Animal Models Of Autoimmune Arthritis

A Postdoctoral position is available in the Department of Pharmacology. The successful candidate will conduct research in the area of animal models of autoimmune arthritis, in particular, the mouse model of collagen induced arthritis (CIA). This individual will utilize the adoptive transfer model of CIA into SCID mice to address questions related to T cell - B cell interaction and lymphocyte trafficking mechanisms involved in autoimmune arthritis. Specific requirements are: Ph.D. or equivalent in Immunology or a related field; knowledge/familiarity with animal models of autoimmune disease; strong background in cell and tissue culture techniques; and a proven record of high quality, productive research. **Dept. CP-GN98A**

Leukocyte-Endothelial Cell Adhesion

A Postdoctoral position is available for a postdoctoral fellow to conduct basic research on molecular and cellular aspects of leukocyte-endothelial cell adhesion. Ongoing projects include investigation of neutrophil rolling and adhesion under flow conditions (J. Clin. Invest., 1996, 98: 1081), and regulation of the L-selectin adhesion molecule (Nature, 1996, 380: 720). Candidates should have strong graduate or prior postdoctoral training in cell biology and/or protein biochemistry. Previous experience in endothelial cell or leukocyte biology is desirable, but not necessary. **Dept. CP-KK98A**

Novel Pro-Inflammatory Genes

A Postdoctoral position is available for a talented, highly motivated individual to work on an ongoing project concerning the identification and functional characterization of novel proinflammatory genes using genetically manipulated cells and transgenic mice. The candidate should have a strong background in molecular and cellular biology, and an interest in the regulation of gene expression. Experience working with transgenic mice is also desirable. **Dept. CP-TP98A**

Biochemical Analysis Of TNF Receptor Associated Factor (TRAF) - Mediated Signaling

A Postdoctoral position is available for a fellow to study the molecular mechanism(s) that promote signaling through TNF receptor-associated factors (TRAFs). Qualifications will include the following: Recent Ph.D. in Biochemistry, Molecular Biology or a closely-related field; experience with commonly used biochemical methodologies; experience with methods for the quantitative characterization of protein-protein and protein-nucleic interactions would prove useful; prior knowledge or a strong desire to learn molecular biology-based methods; experience with prokaryotic and higher eukaryotic expression technologies would be a plus; and a willingness to work in a collaborative environment that fosters individual growth coupled with project success. **Dept. CP–JC98A**

Boehringer Ingelheim Pharmaceuticals, Inc.'s R&D facility is located on a campus-like setting in a beautiful area of Western Connecticut, bordering New York State. We offer excellent facilities and a supportive and challenging environment as well as a competitive salary package and generous relocation benefits to those that qualify. For an opportunity to contribute to our innovative programs, please send your curriculum vitae to: **Boehringer Ingelheim Pharmaceuticals, Inc., Dept. (see positions above), 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877-0368; phone: (800) 344-4095 ext. 5201; email: cprice@bi-pharm.com. As a progressive health care company, we have a smoke-free environment. We are an equal opportunity employer, M/F/D/V.**



Boehringer Ingelheim

POSTDOCTORAL POSITIONS MOLECULAR AND CELLULAR BIOLOGY OF MELANOMA

The Southwest Foundation for Biomedical Research has two Postdoctoral Research positions available to study the structure, regulation, and expression of genes involved in the initiation and progression of malignant melanoma. An established mammalian model for UVinduced melanoma will be used to examine the molecular and cellular biology of melanoma-associated oncogenes and tumor-suppressor genes, both in vivo and in vitro. A doctoral-level degree is required and training or experience in molecular biology, cellular biology, and/or cancer biology techniques is preferred. This study is part of an ongoing Kleberg Foundation and NIH-funded program to be carried out in the laboratories of Dr. Edward Robinson and Dr. John McCarrey. The Southwest Foundation for Biomedical Research provides a stimulating environment in which to pursue biological research, and the city of San Antonio provides a pleasant, low-cost living experience. Interested individuals should send a curriculum vitae, brief summary of past and present research interests, and names of three references to: Director of Human Resources (754), SFBR, POB 760549, San Antonio, TX 78245-0549. See our website: http:// www.sfbr.org.

Equal Opportunity Employer.

POSTDOCTORAL FELLOW AT THE NATIONAL INSTITUTE ON DRUG ABUSE/NIH

A position is available immediately for study of fundamental mechanisms of drug-receptor recognition and transduction. Current projects employ concentration-response and kinetic techniques on voltage clamped Xenopus oocytes to characterize wild-type and mutant forms of the μ opioid receptor. A future project will investigate the relationship between drug recognition and kinetic properties of the ion channel at central nicotinic receptors expressed in voltage clamped oocytes or transfected call lines. The candidate must be a U.S. citizen or permanent resident and should have a doctoral degree with a strong background in pharmacology and training or interest in receptor mechanisms, biochemistry, molecular biology, electrophysiology, and quantitative methods. Salary levels are competitive and some benefits. Please send recommenda-tion to: Charles Spivak, Ph.D., Intramural Research Program, National Institute on Drug Abuse, P.O. Box 5180, Baltimore, MD 21224. E-mail: cspivak@irp.nida.nih.gov. NIDA is an Equal Opportunity Employer.

POSTDOCTORAL POSITION CARDIAC GENE EXPRESSION/ DEVELOPMENT

The laboratory utilizes molecular techniques and transgenic mouse models, as well as knockouts, towards understanding cardiac development and tissue-specific gene expression. The applicant should have a Ph.D. or M.D. and experience with molecular techniques, tissue culture, or mouse genetics. Please mail or FAX your curriculum vitae and a one-page description of past research experience to: Dr. Jeffery D. Molkentin, Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 4529-3039. FAX: 513-636-5958. Children's Hospital is an Affirnative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION available immediately for a qualified Ph.D. to join an active group studying the regulation of the GABA receptor following chronic drug treatment using whole-cell patch techniques in brain slices. Experience with in situ hybridization and immunocytochemical techniques an advantage. Send curriculum vitae and three references to: Dr. E. I. Tietz, Department of Pharmacology, Medical College of Ohio, Toledo, OH 43699. FAX: 419-383-2871; e-mail: tietz@gemini.mco.edu. Medical College of Ohio is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW is available immediately to study virus persistence (LCMV) or immunopathogenesis of influenza virus on transgenic mouse models. Candidates with experience in virology and/or immunology apply to: Dr. Demetrius Moskophidis, Institute of Molecular Medicine and Genetics, MCG, 1120 15th Street, CB-2803, Augusta, GA 30912-2600. FAX: 706-721-8732; Telephone: 706-721-8738; Email: moskophidis@immag.mcg.edu. MCG is an Equal Opportunity Employer.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

The Department of Neurosurgery/Tumor Biology has several openings for **POSTDOC-TORAL FELLOWS** interested in studying the transcriptional control of the urokinase receptor, 92 kDa type IV collagenase and other proteases in invasive cancer.

Candidates should have a Ph.D. or M.D. degree and experienced in molecular biology techniques used to study gene transcription.

Send curriculum vitae, abstract of doctoral thesis, and three reference letters to:

Jasti Rao, Ph.D.
Associate Professor
The Department of Neurosurgery
M. D. Anderson Cancer Center
1515 Holcombe Boulevard, Box 64
Houston, TX 77030

Equal Opportunity/Affirmative Action Employer Women and minority candidates are encouraged to apply Smoke-free environment.

POSTDOCTORAL POSITIONS are available immediately to: (1) examine the expression and regulation of tissue transglutaminase. This protein functions as a crosslinking enzyme and a signal transducing GTP-binding protein. These studies will be related to the pathogenesis of both Alzheimer's and Huntington's disease; or (2) examine the signal transducing pathways involved in modulating the phosphorylation and function of tau protein. These studies will focus on specific signal cascades that may be dysregulated during apoptosis and could contribute to neurodegenerative processes. Experience in cell culture and molecular biological techniques, an interest in the cytoskeleton and cell signaling, and a recent Ph.D. in cell biology, molecular biology, or a related discipline from a North American or European university are required. You will join a well-established research group which is working on modulation of the neuronal cytoskeleton through specific signaling pathways at one of the top 20 NIH-funded institutions. Please send a copy of your curriculum vitae and the names, addresses, and telephone numbers of three references to: Dr. Gail V. Johnson, Department of Psychiatry, 1720 7th Avenue South, SC1061, University of Alabama at Birmingham School of Medicine, Birmingham, AL 35294-0017. E-mail: gvwj@uab.edu; FAX: 205-934-3709.

University of California, Los Angeles. POSTDOC-TORAL POSITION is available immediately to perform structure function studies of cloned Ca channels and regulatory subunits. Molecular biology, biochemical, and electrophysiological techniques are used to unravel channel domains in various channel function. Ph.D. in physiology, physics, biochemistry, or molecular biology. Preferred background: electrophysiology and modeling of channel function. Send curriculum vitae and three references to: Dr. E. Stefani, UCLA, Department of Anesthesiology, BH-612 CHS, Box 951778, Los Angeles, CA 90095-1778. Website: http://rfh.anes.ucla.edu/~enrico; e-mail: estefani@ucla.edu: FAX: 310-825-6649.

POSTDOCTORAL POSITION available to study the regulation of the synthesis of nitric oxide, catecholamines, and serotonin by tetrahydrobiopterin. Some molecular and cell biology experience preferred. Candidates must have less than five years of postdoctoral training. Send curriculum vitae and three letters of recommendation to: Sheldon Milstien, Ph.D., Laboratory of Cellular and Molecular Regulation, NIMH, Building 36, Room 3A-17, Bethesda, MD 20892. FAX: 301-402-1748; e-mail: milstien@codon.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available in molecular neurobiology of neurodegenerative diseases, including Alzheimer's disease, in estalished multidisciplinary laboratory. A strong background is desired in biochemistry and molecular biology to explore the molecular basis of these diseases. Submit curriculum vitae and three references to: Carol A. Miller, M.D., University of Southern California School of Medicine, Department of Pathology, McA-345-2011 Zonal Avenue, Los Angeles, CA 90033. FAX: 213-342-1808.

POSITIONS OPEN

PREDOCTORAL AND POSTDOCTORAL POSITIONS UNIVERSITY OF MINNESOTA Department of Pharmacology

The Department of Pharmacology, University of Minnesota Medical School, has Predoctoral and Post-doctoral openings in several fields. Our faculty members are well-funded and direct strong interdisciplinary research programs.

Areas of emphasis include: Molecular biology, biochemistry, immunology, and neurobiology-neurochemistry; Molecular cloning of receptors, regulation of gene expression (also use of transgenic and gene targeting technology); Intracellular electrophysiology, ion channels; Biochemical/molecular pharmacology; Cancer chemotherapy, immunopharmacology, drug metabolism, enzymology, and anti-viral drugs.

Interested applicants for predoctoral positions should write to: The Director of Graduate Studies for more information. Postdoctoral applicants should send a curriculum vitae, statement of research interests, and names of three references to: Dr. Horace H. Loh, Professor and Head. The address of both predoctoral and postdoctoral applicants is: Department of Pharmacology, University of Minnesota, 3-249 Millard Hall, 435 Delaware Street S.E., Minneapolis, MN 55455.

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

The Department of Medicine (Human Genetics Unit) at the University of Vermont College of Medicine invites applications for three POSTDOCTORAL POSITIONS. Successful candidates will be expected to complement interests in the isolation of disease-related genes, functional determination of their importance, and translating findings from the genetic level to the clinic. Current projects include positional cloning of nuclear genes which interact with mitochondria in carcinogenesis models, determination of organelle relationships with apoptosis genes in human cancer; and in vivo toxicology assessment of novel anti-neoplastic agents which modify gene expression. Experience in molecular biology/ genetics, cell culture, and/or animal models preferred. Subsequent faculty appointment possible. Interested candidates please send curriculum vitae, names and addresses of three references, and cover letter to: Dr. Bertrand C. Liang, Director, Human Genetics, Fletcher Allen Health Care (FH311), 111 Colchester Avenue, Burlington, VT 05401. UVM is an Affirmative Action/Equal Opportunity Employer. Applications from women and people from diverse racial, ethnic, and admund backgrounds are encouraged. Applications accepted until November 28, 1997.

Allegheny University of the Health Sciences is recruiting for two POSTDOCTORAL POSITIONS to study ion channels in cardiac muscle. One position will focus primarily on the development of kinetic models of ion channels in native cardiac myocytes and integration of this kinetic data into a comprehensive cellular model. A second position will focus on the interactions between gating and antiarrhymthmic drug binding and use-dependence using cloned potassium channels. Prior experience in recombinant DNA techniques is desirable. Send curriculum vitae and the names and addresses of four references to: Dr. Randall L. Rasmusson, c/o Tanya Ulrich, Human Resources, Allegheny University of the Health Sciences, 320 East North Avenue, Pittsburgh, PA 15212. E-mail: tulric@aherf.edu. Equal Opportunity Employer. Smoke-free and dnug-free workplace.

Two POSTDOCTORAL RESEARCH ASSOCIATE positions in molecular neurobiology are available immediately to study the composition, origin, and cellular trafficking of mRNA in the axon and presynaptic nerve terminal. Candidates must have less than five years of previous postdoctoral training. Experience in molecular/cellular biology is preferred. Send curriculum vitae and three letters of reference to: Barry B. Kaplan, Ph.D., National Institute of Mental Health, Building 10, Room 4N-222, 10 Center Drive, Bethesda, MD 20892-1381. E-mail: kaplan@irp.nimh.nih.gov.

The NIMH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of mutagenesis in *E. wli.* This NIH-funded appointment is for one year, renewable. A background in molecular biology or biochemistry is required and genetic experience preferred. Send curriculum vitae and three references to: Patricia Foster, Ph.D., Boston University Medical Center, 715 Albany Street, S107, Boston, MA 02118. FAX: 617-638-5677; e-mail: pfoster@bu.edu.

RESEARCH TECHNICIAN TRANSGENIC MOUSE FACILITY

Responsibilities include egg injection for the production of transgenic mice, ES cell injection into blastocysts for the generation of chimeric mice, and cryopreservation of embryos. Requires a Bachelor's degree and three to five years of research experience in genetics, embryology, and/or molecular biology. Please submit your resume and two letters of recommendation to: M. Ko, Employment Dept., #97146.1R, MSKCC, 633 Third Avenue, 5th Floor, New York, NY 10017. E-mail in ASCII text to: browna@mskcc.org. EOE/AA.



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Cancer Genomics & Drug Discovery

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SCIENTIST

We're looking for a highly motivated, creative genomics scientist and/or cancer molecular biologist to join Tularik's cancer gene discovery project at our New York facility. The successful candidate will have a Ph.D. in molecular biology or related field; at least 2 years' postdoctoral experience; and a demonstrated record of scientific accomplishments.

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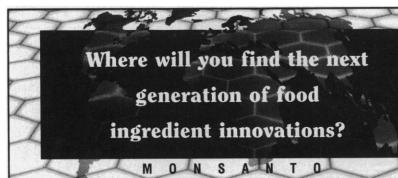
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SENIOR SCIENTIST Biochemist/Protein Chemist

The selected candidate will develop expression of heterologous cytochrome P450s within the context of a metabolic engineering project. Candidates must demonstrate the ability to design and execute a research project under minimal supervision, as well as the ability to work effectively on multiple projects both independently and as part of a multi-disciplinary team. The demonstrated ability to conceive and develop new technological approaches to solving problems is critical.

We require a Ph.D. in Biochemistry or Molecular Biology, along with 3-6 years of additional experience. Substantial practical experience in the expression of heterologuos cytochrome P450s, as well as broad and specific abilities in the biochemistry of cytochrome P450s are essential. Experience in the design and assembly of gene constructs for heterologous expression is a must. Fundamental knowledge and demonstrated expertise in the analytical aspects of molecular biology as well as experience in the development and use of enzyme assays is preferred.

For immediate consideration, please send your resume, along with 3 references to: The Monsanto Life Sciences Company, Attn: Human Resources, Job Code SGB3, 8355 Aero Drive, San Diego, CA 92123-1718. Please visit our website at: www.monsanto.com. EEO/AA Employer M/F/D/V.

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POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available immediately in the Laboratory of Epithelial Cell Biology at the Du-Pont Hospital for Children in Wilmington, Delaware. The primary focus of the laboratory is the regulation of chloride channel activity in cystic fibrosis (CF) and the biochemical basis for the relationship between the loss of CFTR activity and CF pathophysiology. The first position involves studies of kinase-dependent activation of normal and mutant forms of the CFTR. Expertise in electrophysiology (patch clamping or two electrode voltage clamping), cell culture, and molecular biology is required. Experience with protein labeling would be helpful. The second position involves studies of antibacterial activity by normal and CF airway cells. Expertise in mammalian and bacterial cell culture is essential. Experience with ion transport electrophysiology would be helpful. The Du-Pont Hospital for Children is the pediatric teaching hospital for Thomas Jefferson University and the Laboratory of Epithelial Cell Biology is part of the Department of Pediatric

Competitive salary and benefits plans are offered. For consideration, indicate the position applied for and send/FAX a curriculum vitae with the names of three references to: Dr. William Reenstra, Department of Clinical Science, DuPont Hospital for Children, P.O. Box 269, Wilmington, DE 19899. FAX: 302-651-6899. DuPont Hospital for Children is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION DANA FARBER CANCER INSTITUTE HARVARD MEDICAL SCHOOL

A Postdoctoral Position is available to use mouse knockout/transgenic approaches to study the role of chromosome structure and segregation in the development of cancer. The project is an ongoing collaboration between the laboratory of **Dr. David Pellman**, at the Dana Farber Cancer Institute, and the laboratory of **Dr. Stuart Orkin**, at the Howard Hughes Medical Institute at the Children's Hospital. Experience in molecular biology is required and experience with gene targeting or the construction of transgenic mice is preferred. Please send a curriculum vitae and the names of three references to: **Dr. David Pellman**, The Dana Farber Cancer Institute, **D1620**, **44** Binney Street, Boston, MA **02115**. Email: david_pellman@dfci.harvard.edu.

POSTDOCTORAL POSITION available to study virus-receptor interactions. Projects include structural studies of receptors for picomaviruses and adenoviruses, and studies of receptor function in virus entry, pathogenesis, and gene delivery (see Science 275:1320; J. Biol. Chem. 272:28518). Applicants with experience in cellular and molecular biology, virology, or protein chemistry will be considered. Please send curriculum vitae and names of three references to: Dr. Jeffrey Bergelson, Abramson 302F, Children's Hospital of Philadelphia–University of Pennsylvania, 34th Street and Civic Center Boulevard, Philadelphia, PA 19104. Telephone: 215-590-3771; FAX: 215-590-2025; email: bergelson@email.chop.edu.

POSTDOCTORAL POSITION available immediately for experienced Molecular Biologist to participate in studies of the immunology of cancer and in ongoing human cancer immunotherapy trials. Successful applicant will study molecular mechanisms of cancer antigen presentation. Send curriculum vitae and the names of three references to: Gary Wood, Ph.D., Barbara Ann Karmanos Cancer Institute, Wayne State University, Harper Hospital, 3990 John R. Detroit, MI 48201. FAX: 313-996-7491; e-mail: gwood@oncgate.roc. wayne.edu. Wayne State University is an Equal Opportunity/ Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—People working together to provide quality service.

POSTDOCTORAL POSITION available immediately to study adhesion receptor structure and function and the role of receptor mediated adhesion and signaling on the biology of vascular cells. Applicants will have significant experience in biochemistry, cellular and molecular biology, and the analysis of gene expression. Experience with transgenic mice and ES cell methods is highly desirable. Send curriculum vitae and the names and addresses of three references to: Joseph C. Loftus, Ph.D., Department of Biochemistry and Molecular Biology, Mayo Clinic Scottsdale, 13400 East Shea Boulevard, Scottsdale, AZ 85259. Mayo Clinic Scottsdale is an Affirmative Action Employer and Educator.

POSITIONS OPEN

POSTDOCTORAL POSITIONS THE ROCKEFELLER UNIVERSITY FIELD RESEARCH CENTER Millbrook, New York

Applications are invited for three Postdoctoral positions that will be used to establish a young multidisciplinary research group that will work on the interfaces that natural history and behavior have with neurobiology, molecular biology, and immunology. The search is for uncommonly intelligent, original, independent, and productive thinkers. Promotion to faculty is possible. The Field Research Center has laboratory facilities and 1,200 acres of natural habitats; it is in the lower Hudson Valley 90 miles to the north of the University's Manhattan campus. Send curriculum vitae, a letter describing your interests, and the names of three individuals that are familiar with you and your work. Address inquiries and correspondence to: Fernando Nottebohm, Director, Rockefeller University Field Research Center, Tyrrel Road, Millbrook, NY 12545. FAX: 914-677-6491; e-mail: nottebo@rockvax.rockefeller.edu. Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

A position is available immediately to study the regulation of stress-activated signal transduction pathways and transcription of cytokine genes in keratinocytes. Candidates with experience in protein kinase/phosphatases, G proteins, and molecular biology in animal or plant systems are especially encouraged to apply. Send curriculum vitae and three references to: Faith Strickland, Ph.D., Department of Immunology-178, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030. FAX: 713-794-1322; e-mail: fstrickl@notes.mdacc.tmc.edu. Equal Opportunity Employer. Smoke-free environment.

POSTDOCTORAL POSITIONS GENE REGULATION AND GROWTH CONTROL

Immediate openings for Ph.D's trained in molecular biology to study transcription control mechanisms during skeletal and cardiac myogenesis (1), pancreatic development (2), hematopoiesis (3), and oncogenesis (4). *In vitro* model systems as well as transgenic mouse and knockout technologies are being used. Send curriculum vitae and the names of three references to:

Dr. Stephen F. Konieczny (Projects 1 and 2) Dr. Elizabeth J. Taparowsky (Projects 3 and 4) Department of Biological Sciences Purdue University West Lafayette, IN 47907-1392

Purdue University is an Equal Opportunity Employer.

Mayo POSTDOCTORAL FELLOWSHIP. Neurobiology of aging—Mayo Clinic Jacksonville is seeking applicants for a Postdoctoral Fellowship to study gene expression in the aging brain. The research in this laboratory addresses mechanisms of differential vulnerability of central cholinergic neurons in aging, particularly with respect to oxidative stress. Ongoing projects include studies of mRNA and protein for candidate genes, using methods of in situ hybridization histochemistry, immunocytochemistry, RT/PCR, differential display, and Western blotting. Applicants with graduate-level training in molecular neuroscience or biochemistry, and having an interest in aging research, should send their résumé and addresses of three references to: Dr. Michael McKinney, Ph.D., Mayo Clinic Jacksonville, 4500 San Pablo Road, Jacksonville, FL 32224. Mayo is an Affirmative Action/Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITIONS in structural biology and signal transduction. Positions are available to study the structural basis of growth factor receptor activation and develop inhibitors of receptor activation. Soluble kinase-active growth factor receptors are being used in crystallographic and biochemical studies, and as targets for screening combinatorial libraries. Experience in X-ray crystallography, molecular biology, protein biochemistry, or combinatorial chemistry is required. To apply send curriculum vitae and three reference letters to: Dr. Stan Watowich, Department of Human Biological Chemistry, University of Texas Medical Branch, Galveston, TX 77555. E-mail: watowich@bloch.utmb.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS NUCLEIC ACID VACCINES AND DENDRITIC CELL THERAPIES

Positions are available immediately at the RE-SEARCH ASSOCIATE or INSTRUCTOR level to study basic mechanisms of cutaneous immunity and dendritic cell biology for the purpose of developing novel protein and gene-based antigen delivery strategies for vaccination and immunotherapy (see Nature Medicine 2(10): 1122–1128, 1996; Nature Medicine 1:1297, 1995; J. Exp. Med. 183:283, 1996; and Nature Medicine 1:649, 1995). Significant experience in molecular biology is required. Applicants should send letter of interest and curriculum vitae to: Louis D. Falo, Jr., M.D., Ph.D., Vice-Chairman, Department of Dermatology, University of Pittsburgh School of Medicine, 190 Lothrop Street, Pittsburgh, PA 15213. FAX: 412-624-7737; e-mail: falo@pcicirs.pci.pitt.edu.

FELLOWSHIPS

PUBLIC POLICY OPPORTUNITIES IN WASHINGTON, D.C.

The American Association for the Advancement of Science invites applications for one-year PUBLIC POLICY FELLOWSHIPS, which bring scientists and engineers to Washington, D.C., to work in the U.S. Congress, the U.S. Department of Defense, the U.S. Department of State, the U.S. Agency for International Development, the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the U.S. Food and Drug Administration, and the RAND Critical Technologies Institute. Applicants must be U.S. citizens and must have a Ph.D. or equivalent doctoral-level degree at the time of application (January 1998) from any physical, biological, or social science or any field of engineering. Persons with a Master's degree in engineering and at least three years of post-degree professional experience may also apply. Federal employees are not eligible for the Fellowships. The programs are designed to provide each Fellow with a unique public policy learning experience and to bring technical backgrounds and external perspectives to decision making in the U.S. government. Stipends vary by program. All applications must be postmarked by January 15, 1998. For further information and application istructions Telephone: 202-326-6700; FAX: 202-289-4950; e-mail: science_policy@aaas.org.

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Class website: http://www.cee.umn.edu/biodeg/index.html.

BECKMAN RESEARCH INSTITUTE—CITY OF HOPE NATIONAL MEDICAL CENTER PREDOCTORAL PROGRAM IN BIOLOGICAL SCIENCES is accepting applications for admission to the September, 1998 class. Specialties are in molecular biology, macromolecular structure, neurosciences, and medically related areas. Students must have advanced coursework, research experience, or a Master's degree in biology or chemistry. Application deadline February 1, 1998. Contact: Thomas R. LeBon, Ph.D., Graduate Education Coordinator, City of Hope Graduate School, Duarte, CA 91010-3011. Telephone: 626-359-8111, ext. 3641; FAX: 626-930-5440; e-mail: tlebon@smtplink.coh. org; website: http://www.cityofhope.org/research/graduate/graduate.htm.

GRANTS

PARKINSON RESEARCH GRANTS 1998-1999

The National Parkinson Foundation of Miami, Florida invites the submission of grant proposals for Parkinson research. Funding is made available to support basic bench research in Parkinson's disease. The award for a single grant will not exceed \$40,000.00. None of the monies are to be utilized for administrative overhead or travel expenses. The application deadline is February 1st, 1998. Funding will commence on June 1st, 1998. It is required that proposed studies specifically focus on mechanisms involved in the disease process and that they have the potential of finding the cause and prevention of Parkinson's disease. Scientists entering the field of Parkinson research are encouraged to apply. Proposals will be assessed by the National Parkinson Foundation Scientific Advisory Board. To obtain submission information please write to:

> Paula Conley Programs and Grants Administrator National Parkinson Foundation 1501 N.W. 9th Avenue Miami, FL 33136

ANNOUNCEMENT

THE DAVID STARR JORDAN PRIZE for Innovative Contributions to the Study of Evolution, Ecology, Population or Organismal Biology

In 1986, Cornell, Indiana, and Stanford Universities established a joint endowment to fund a prize in honor of David Starr Jordan, a scientist, educator, and institution builder with important ties to each of these insti-tutions. The prize is international in scope and presented approximately every three years to a young scientist (normally 40 years of age or less, or with not more than 10 years since receipt of Ph.D.) who is making novel, innovative contributions in one or more of the areas of Jordan's interest: evolution, ecology, and population and organismal biology.

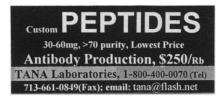
The intent of this prize is to recognize young scientists who are making research contributions likely to redirect the principal focus of their fields. In addition to a cash award, the recipient will receive a commemorative medal and will attend an awards ceremony, visit each of the institutions, and give scholarly presentations of his/her work. The selection of the prize winner will be made by a committee composed of representatives from each of the three institutions.

The Fourth David Starr Jordan Award will carry a prize of \$15,000 and will be announced in mid 1998. Nomination forms are available from:

Dr. Jeffrey Palmer Department of Biology Jordan Hall Indiana University Bloomington, IN 47405 Telephone: 812-855-6284 FAX: 812-855-6705

All nomination materials must be received prior to February 1, 1998.

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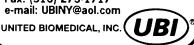


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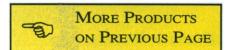
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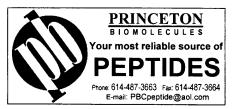
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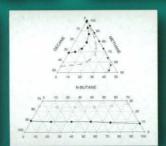
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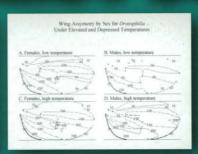
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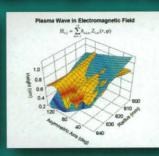
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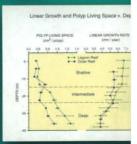
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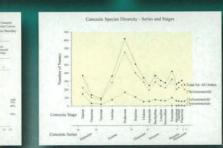




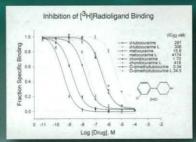


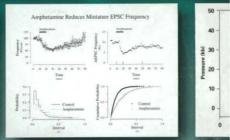




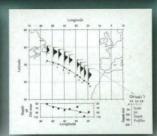






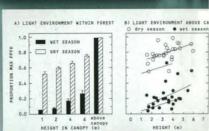






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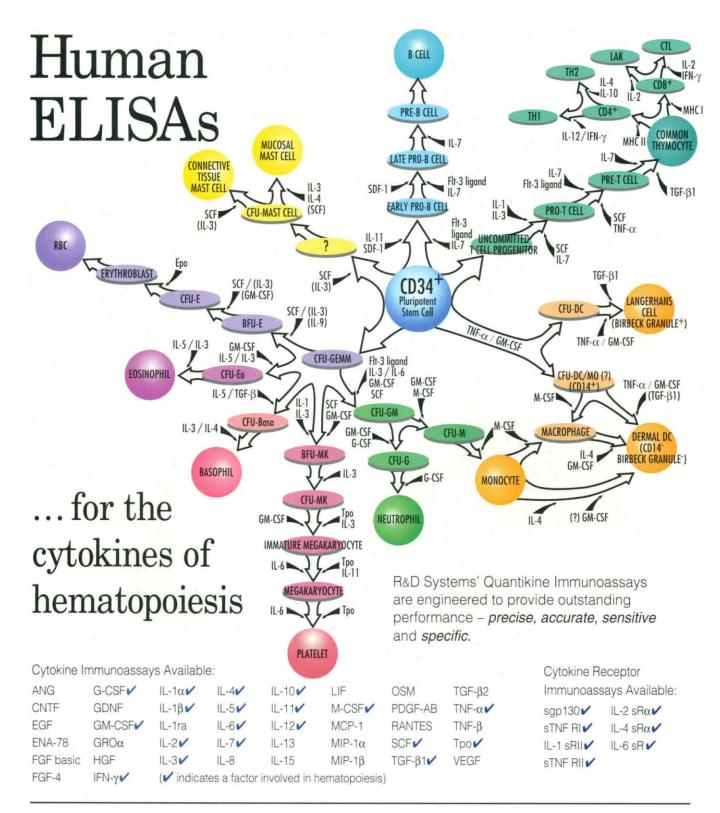
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