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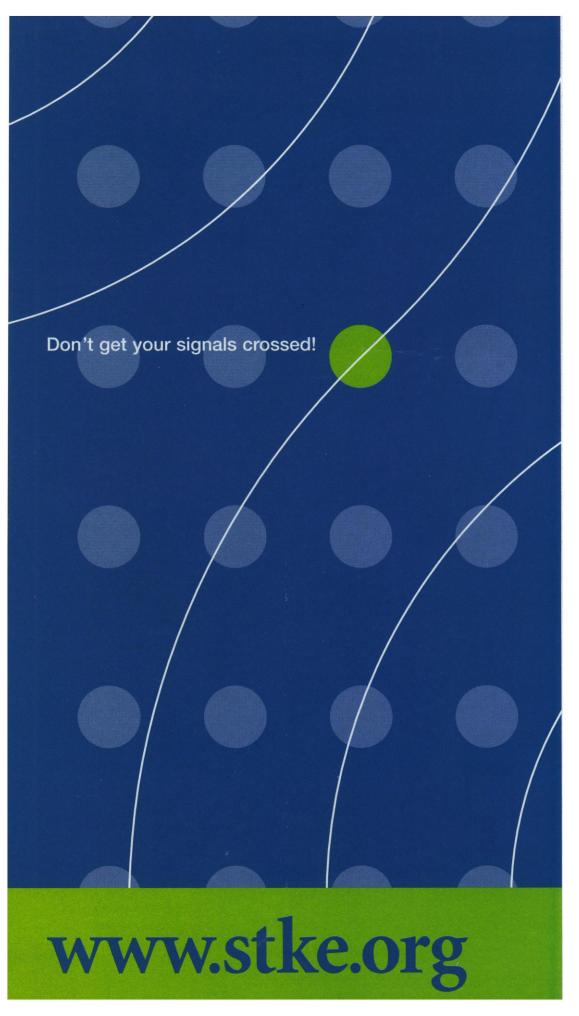
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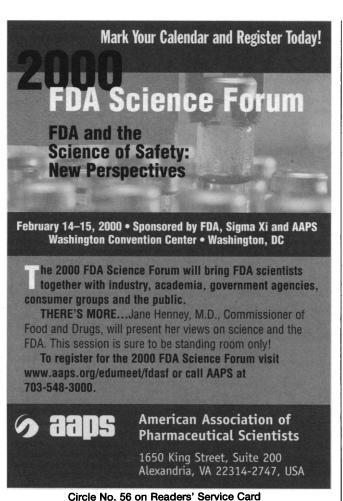


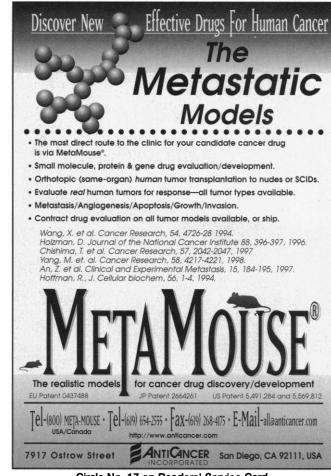
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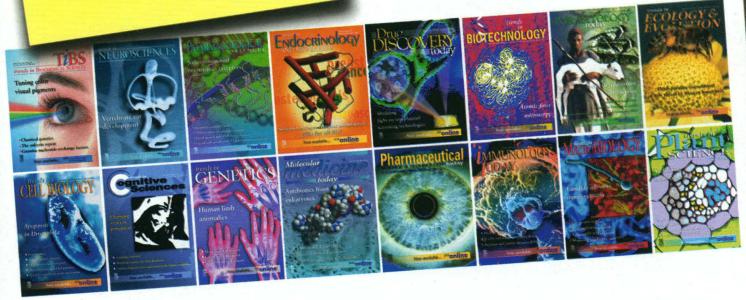




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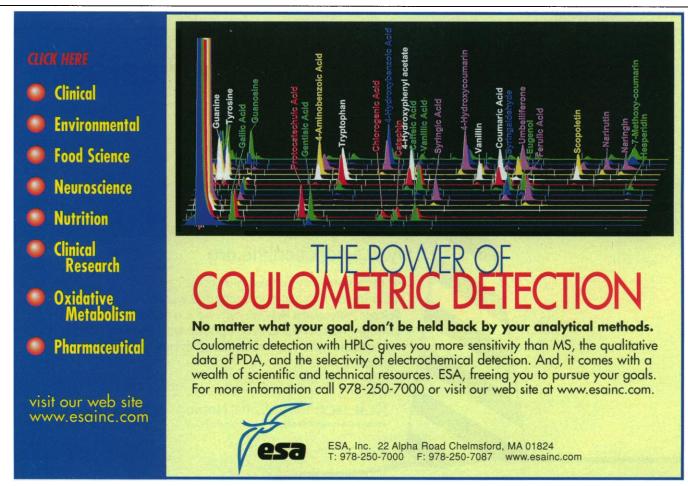
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CONTINUED ON PAGE 1390



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This patent-pending osmotic delivery system is for introducing antisense oligonucleotides, peptides, proteins, and other substances into the cytosol of cultured

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er, the system is faster, simpler, more reliable, and less damaging than liposomal and streptolysin-O delivery.

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Model 1050 Computer Interface Freezing System is for complete control and moni-

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LITERATURE

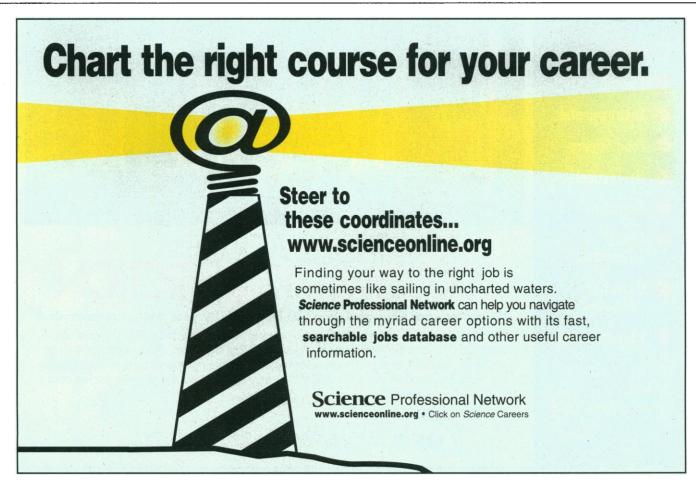
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POSITIONS OPEN



ASSISTANT PROFESSOR Cardiovascular Physiology University of Pennsylvania School of Medicine Department of Physiology

The Department of Physiology is seeking a highly qualified person as an Assistant Professor (tenure accruing) to develop an independent research program in integrative cardiovascular physiology using cellular and molecular biological approaches. Candidates must have a Ph.D. and/or M.D. degree. Submit curriculum vitae, full list of publications, addresses of three references, and a brief statement of research interests by December 31, 1999, to: Dr. Yale Goldman, Cardiovascular Search Committee, University of Pennsylvania School of Medicine, 3700 Hamilton Walk, Philadelphia, PA 19104-6085. University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority applicants are encouraged to apply.

FACULTY POSITIONS University of Wisconsin Genomics Initiative

The UW-Madison seeks ASSISTANT, ASSOCI-ATE, or FULL PROFESSOR tenure-track faculty in genomics. Candidates should demonstrate the ability to conduct a vigorous research program and teach.

A Genome Center is being established at Madison as a center of excellence in the study of genomes as a whole. Faculty will hold joint appointments in relevant academic departments in physical, biological, computational, and engineering sciences. The Center seeks faculty in:

Genome sequence determination and mapping with expertise in the biology of a targeted model organism.

Functional genomics, including parallel strategies for interpreting the biochemical function, 3D structure, and/or biological role of unknown genes found in genome data.

Comparative evolutionary genomics with stress on whole genome analyses. Bioinformatics, including the interpretation, analysis and distribution of information on genomes being sequenced at Wisconsin.

Include a curriculum vitae and a one-page statement relating your research and teaching interests to the points above, up to five reprints, up to five letters of reference, and any other (brief) information you wish to provide. Specific inquiries may be mailed to e-mail: fred@genetics.wisc.edu. Send applications to: Professor Frederick R. Blattner, c/o Mary Simpson, University of Wisconsin Biotechnology Center, 425 Henry Mall, Madison, WI 53706.

Faculty of the UW Genome Initiative at UW-Madison: Jeffrey Bennetzen, Frederick Blattner, John Doebley, Sally Leong, David Schwartz, Lloyd Smith, and Michael R. Sussman.

The University of Wisconsin-Madison is an Equal Opportunity and Affirmative Action Employer. Women and minority candidates are especially urged to apply.

The Biology Department invites applications for a TENURE-TRACK FACULTY POSITION to start August 1, 2000. Candidate must have a Ph.D. (or equivalent doctorate) plus postdoctoral and/or teaching experience and an active research program. Teaching responsibilities include genetics, developmental biology, general biology II and a non-majors course in genetics. Send letter of application, curriculum vitae and names of three references by December 1, 1999 to: Dr. Lawrence Aaronson, Utica College of Syracuse University, 1600 Burrstone Road, P.O. Drawer 104S, Utica, NY 13502-4892. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE TRACK FACULTY POSITIONS

The Science Division at Truman State University invites applications for three positions starting August 2000. Teaching and research are mutually supportive activities at Truman; candidates should be strongly committed to both teaching and developing an activer research program involving undergraduate and possibly graduate students at a liberal arts and sciences university. Laboratory space and start-up funds will be provided. An opportunity exists to develop an interdisciplinary course in Truman's Liberal Studies Program.

1. Mammalogy/Ecology. Teaching responsibilities will include mammalogy, ecology, and rotation through introductory biology (for majors and/or non-majors). We are especially interested in candidates whose research involves fieldwork. Search Chair: Dr. Thomas Bultman.

2. Microbiology/Genetics. Teaching responsibilities will include microbiology, genetics, and rotation through introductory biology (for majors and/or non-majors). We are especially interested in candidates whose research involves prokaryotes. Search Chair: Dr. Michael Lockhart.

3. History/Philosophy of Science. Teaching responsibilities will include history of science and philosophy of science to undergraduates including elementary education majors, a philosophy of science course for graduate programs in education and biology, and an introductory course in one's primary science area. Search Chair: Dr. Dana Delaware.

Truman State University (website: www.truman. edu) is Missouri's only highly selective, public liberal arts and sciences university. U.S. News and World Report ranks Truman as the top regional public university in the Midwest. Students benefit from a university-wide 16:1 student/faculty ratio and the opportunity to work closely with faculty conducting research. Candidates must possess a Ph.D. by August 2000. The History/Philosophy of Science candidate should have a bachelors degree in a field of science. Complete applications include a curriculum vitae, statements of teaching philosophy and research goals, copies of all undergraduate and graduate transcripts, and three letters of recommendation. All materials should be sent to the respective search chairs at: Division of Science, Truman State University, Kirksville, MO 63501, Telephone: 660-785-4597; FAX: 660-785-4045. Completed applications will be reviewed starting December 15, 1999. Truman is an Equal Employment Opportunity Institution committed to cultural diversity and compliance with the Americans with Disabilities Act.

TENURE-TRACK ASSISTANT PROFESSOR School of Natural Resources The University of Vermont Sustainable Forest Ecosystems

This position focuses on teaching, research, and outreach related to understanding and managing forest ecosystems/landscapes in a sustainable manner. Applicants must have a Ph.D. or equivalent, a commitment to field-oriented undergraduate and graduate teaching, and a strong record or high potential for research in sustainable forest ecosystem science, sustainable planning and/or ecosystem management. Responsibilities include teaching a required undergraduate course and advanced undergraduate/graduate courses emphasizing sustainable management and planning of forest ecosystems/landscapes, and academic advising of B.S., M.S., and Ph.D. students in Forestry, Natural Resources, and Natural Resource Planning. Screening will begin January 10, 2000, and will continue until the position is filled. Inquiries, nominations, and applications (1 page statement on teaching and research interests, curriculum vitae, names/contact information for at least three references) should be sent to: Dr. Deane Wang, Chair, Search Committee, School of Natural Resources, University of Vermont, Burlington, VT 05405-0088; Telephone: 802-656-4057; e-mail: Deane. Wang@uvm.edu. UVM is an Equal Opportunity/Affirmative Action Employer, Multicultural and female candidates are urged to apply.

DEAN, SCHOOL OF MEDICINE/VICE CHANCELLOR, HEALTH SCIENCES

UNIVERSITY OF CALIFORNIA, SAN DIEGO

The University of California, San Diego invites applications and nominations for the position of Vice Chancellor, Health Sciences and Dean, School of Medicine. UCSD School of Medicine is ranked among the top ten U.S. medical schools in biomedical research. Over 650 faculty members are engaged in laboratory or clinical research. The School enrolled 1,233 in 1998 with 482 in the M.D. program, 531 residents, 196 Ph.D. students and the balance in allied health studies. UCSD Healthcare is the only university-based health care provider in the San Diego region, with comprehensive medical centers in San Diego and La Jolla offering a broad spectrum of outpatient and in patient services. The School's budget is more than \$650 million with \$183 million in sponsored project funding.

We are seeking an energetic and accomplished academic leader to assume responsibility for fulfilling the School's teaching, research, clinical and public service missions, and for leading the department chairs, directors of organized research units, Board ofGovernors, healthcare executives, and associate deans in this effort. The Vice Chancellor/Dean is responsible for strategic planning, management and the development, allocation and integration of resources

to enhance Health Sciences' status as a preeminent academic community valued locally, nationally, and internationally for excellence, innovations, and diversity.

The successful candidate will possess a broad intellect and grounding in academic medicine, with an MD and a record of scholarly and professional accomplishments. Requires a record of: managerial performance that serves many constituencies; leadership in developing exemplary academic, research and clinical programs; supporting faculty; and success in attracting financial support from governmental, foundation, corporate and private sources.

The Search Committee will review applications beginning January, 2000. The search process will remain open until an appointment is made. UCSD offers a competitive compensation program commensurate with experience.

Please send nominations and application materials to: Dr. C. Richard Boland, Chair, Search Committee for Vice Chancellor/ Dean, School of Medicine, University of California, San Diego, 9500 Gilman Drive 0922, La Jolla CA 92093-0922 or E-mail to sendcv@ucsd.edu. EOE/AA



Director Office of Intellectual Property

Michigan State University invites nominations and applications for the position of Director of the Office of Intellectual Property. The Director will provide leadership and support for the development and commercialization of research for the University. MSU receives approximately \$232 million in external research funding and \$19 million in royalty revenue annually.

The Position: Reporting directly to the Vice President for Research and Graduate Studies and secondarily to the Michigan State University Foundation that funds the activities of the Office of Intellectual Property, the Director will:

- Assist the faculty in capitalizing on commercial opportunities and expand relationships with the corporate sector
- Ensure institutional compliance with state and federal technology transfer requirements
- Oversee the operations and staff of the Office of Intellectual Property
- Work with the Foundation and state and local business community to increase the transfer of technology from MSU to the private sector
- Continue an education program to increase awareness of intellectual property issues
- Support the Office of the Vice President for Research and Graduate Studies

Qualifications: MSU seeks a dynamic individual with an understanding of the issues and opportunities facing major research universities. He/she should have an understanding of the legal issues inherent in licensing, corporate organization and intellectual property and have experience in marketing various technologies. Ability to work with diverse constituencies as well as superior administrative and communication skills required. Minimum of five years of experience and an advanced degree in the sciences, and/or engineering strongly desired, Ph.D. preferred.

Applications and nominations should be sent to:

Steven Flowers
Chair, Director of Intellectual Property Search Committee
412 Administration Building
Michigan State University
East Lansing, Michigan 48824

MSU is an equal opportunity/affirmative action employer and desires a diverse candidate pool. For further information contact Margot Lansing at lansing@mediaone.net, telephone 781-237-1754.

ASSOCIATE SCIENTISTS, IMMUNOLOGY & INFLAMMATION

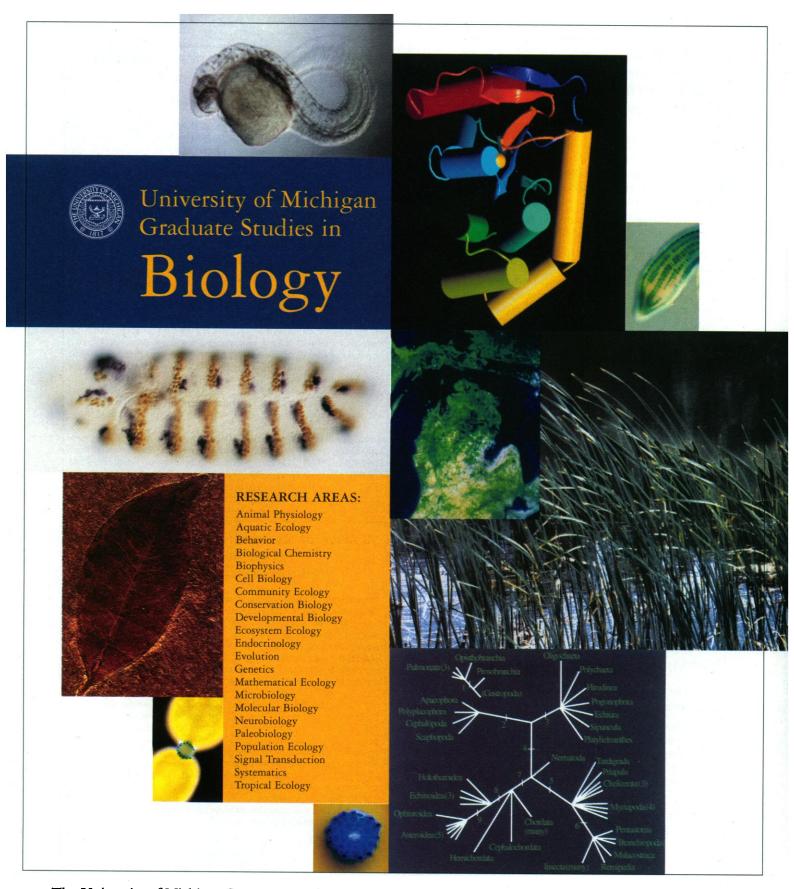
Merck & Co., Inc., a leading research-driven pharmaceutical products and services company that is ranked by Fortune in the top 10 of "America's Most Admired Companies," is currently seeking motivated, talented Associate Scientists to join multidisciplinary teams striving to develop breakthrough therapies in the areas of immune and inflammatory disorders. The focus is leukocyte trafficking and chemokine biology/biochemistry with the goal of developing small molecules that modulate these processes.

Responsibilities include the development, implementation, and performance of biochemical and functional assays for the identification and characterization of such modulators; the cloning and expression of receptors and other components of the chemokine system; and the study of the transduction pathways activated by these receptors. Candidates for all positions must have a B.S., M.S., or equivalent with 2-3 years' experience in biochemistry, cell biology, or molecular biology. A broad background in molecular biology and receptor biding is advantageous.

We are committed to providing our employees with a stimulating work environment and opportunities for growth as well as a comprehensive salary and benefits package. Please forward your resume and cover letter, indicating salary requirements, to: Merck & Co., Inc., Department of Immunology Research, Ad# 111, P.O. Box 2000, Rahway, NJ 07065. No phone calls please. We are an Equal Opportunity Employer, M/F/D/V.







The University of Michigan Department of Biology provides an extraordinarily diverse offering of research areas for advanced study, including cell and molecular biology, neurobiology, ecology, evolution, and environmental studies. Students are guaranteed 5 years of support including funds for tuition,

health care, and a living stipend. For more information on program flexibility and admissions, write to Graduate Coordinator, Department of Biology, Natural Science Building, University of Michigan, Ann Arbor, MI 48109-1048. Please visit our web site: www.biology.lsa.umich.edu or call us directly at (734) 764-1443.

The University of Illinois at Urbana-Champaign School of Molecular & Cellular Biology Multiple Faculty Positions in Molecular and Cellular Biology

The School of Molecular and Cellular Biology at the University of Illinois at Urbana-Champaign invites applications for faculty positions in any area of Molecular and Cellular Biology. Areas of special interest include, but are not limited to:

Cell Biology; Developmental Biology; Cellular Neurobiology; Immunology; and Structural Biology

These positions are full-time and tenure track in the departments of Biochemistry, Cell and Structural Biology, Microbiology, and Molecular and Integrative Physiology. Although we anticipate most of these appointments will be made at the Assistant Professor level, applications for positions at the Associate and Full Professor levels will also be considered and highly qualified scientists at these levels are encouraged to apply. The starting date for these positions is August 2000. Appointment at the Assistant Professor level requires a Ph.D. or M.D./Ph.D. degree, postdoctoral experience, and evidence of outstanding research potential. Appointees at this level will be expected to develop a vigorous, independently funded research program. Appointment at higher levels requires evidence of outstanding research accomplishments including extramural funding and national recognition. Applicants at all levels will be expected to contribute effectively to undergraduate/graduate teaching.

This search is part of a broad campus effort to develop molecular and cellular biology in the context of the biotechnology initiative, the College of Medicine, the College of Liberal Arts and Sciences, and other campus units. The University of Illinois is committed to significant future growth in this area and we anticipate additional hires in these and related areas each year for the next several years. Successful candidates will be provided with excellent laboratory facilities, substantial start-up funds, and a salary commensurate with experience. The University of Illinois at Urbana-Champaign offers a highly interactive, interdisciplinary research environment and state-of-the-art research support facilities. Information concerning Molecular & Cellular Biology at the University of Illinois can be found at http://www.life.uiuc.edu/mcb/index2.html.

Applicants should submit a curriculum vitae with a complete list of publications, a concise summary of research interests and future plans, and four letters of recommendation. Area(s) of expertise should be identified at the top of the cover letter. Applications should be addressed to:

School of Molecular and Cellular Biology University of Illinois at Urbana-Champaign 393 Morrill Hall, 505 S. Goodwin Ave. Urbana, IL 61801 FAX: 217-265-0927

Electronic submissions are encouraged and should be sent to **mcbsearch@life.uiuc.edu**. To ensure full consideration, applications should be received by Dec. 6, 1999. Interviews may be conducted before the closing date but no offers will be made before that time.

The University of Illinois at Urbana-Champaign is an Affirmative Action, Equal Opportunity Employer.

RADIATION EFFECTS RESEARCH FOUNDATION HIROSHIMA, JAPAN ASSOCIATE CHIEF OF RESEARCH

The U.S. National Academy of Sciences (NAS) is seeking a Resident Associate Chief of Research for the Radiation Effects Research Foundation (RERF) in Hiroshima, Japan. RERF is a cooperative US-Japan research foundation with approximately 290 employees in laboratories in Hiroshima and Nagasaki, Japan. The Foundation is funded by the Government of Japan, through the Ministry of Health and Welfare, and by the U.S. Government, through the NAS with funds from the Department of Energy (DoE). RERF is managed by citizens of the two countries.

The position of Associate Chief of Research is a senior leadership position with responsibility to assist in the direction of the research activities conducted at RERF on the long-term follow-up of late health effects among the survivors of the atomic bombs. The Associate Chief of Research assists three RERF Directors, all of whom live in Japan, in the day-to-day management of the Foundation. Qualified candidates for this position must be U.S. citizens and have an M.D. or Ph.D with extensive experience in basic research (genetics, molecular biology, cellular biology, epidemiology, immunology, etc.) and management of multi-disciplinary research programs. The Associate Chief of Research is an employee of the United States National Academy of Sciences and RERF. The salary will be commensurate with experience and will be supplemented by relocation, housing, and cost-of-living benefits. Typical NAS appointments are for two years with possible reappointment.

Please send your resume and the names and addresses of at least three references to: Dr. Evan B. Douple, Board on Radiation Effects Research, (NAS 342-ED), National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418. (FAX: 202-334-1639; e-mail: edouple@nas.edu) EOE

College of Medicine at Urbana-Champaign Assistant Professor Neuroscience/Pharmacology

The College of Medicine and the School of Molecular and Cellular Biology of the University of Illinois at Urbana-Champaign invite applications for a fulltime tenure-track Assistant Professor in Neuroscience. A Ph.D. and/or M.D. degree, postdoctoral experience, and evidence of outstanding research potential are required for appointment to this position. The appointee will be expected to develop a vigorous, independently-funded research program that addresses contemporary questions in any area of neuroscience. Excellent laboratory facilities and attractive start-up packages will be provided. Neuropharmacology in the College of Medicine curriculum will be the primary teaching responsibility of the appointee. Broadly based research in neuroscience is a major strength of the University of Illinois at Urbana-Champaign (www.uiuc.edu) and there is a dynamic campus-wide Neuroscience Graduate Program (www.life.uiuc.edu/ neuroscience). The University offers a highly interactive, interdisciplinary research environment, outstanding engineering, computational and physical science programs, and state-of-the-art research support facilities. Urbana-Champaign offers the residential advantages of a medium-sized university city, excellent cultural opportunities, and easy access to Chicago and St. Louis. The starting date for the position is August 2000. Applicants should submit a curriculum vitae with a complete list of publications and a summary of research interests and future plans, and should arrange to have at least 3 letters of reference sent to:

> Pharmacology Search Attn: Letitia Klatt University of Illinois College of Medicine Medical Sciences Building 506 South Mathews Avenue Urbana, IL 61801

For fullest consideration, applications should be received by December 21,

The University of Illinois is an AA/EO employer.

UNIVERSITY OF CALIFORNIA, DAVIS



DIRECTOR, JOHN MUIR INSTITUTE OF THE ENVIRONMENT

The University of California, Davis, invites nominations and applications for the position of Director, John Muir Institute of the Environment. The John Muir Institute of the Environment is an Organized Research Unit and is envisioned as a premier center for research and outreach on the biological, physical and human environment. The Institute will foster and disseminate integrative, multi-disciplinary environmental research and will contribute broadly to graduate education in environmental program areas. Its central mission will be to provide the scientific, humanistic and

policy advancements necessary for addressing the major environmental issues facing California, the nation and the world. The Institute will fully coordinate the campus' expansive environmental portfolio, and will champion UC Davis as a world leader in the environmental sciences through innovative outreach efforts that harness the extraordinary diversity of environmental expertise at UC Davis.

The Director of the John Muir Institute of the Environment will provide academic and administrative leadership to the environmental sciences at a campus-wide level. He/she will serve as integrator of research and outreach programs at UC Davis that span the humanities, social sciences and policy, biological and physical sciences and engineering, and the health sciences. The Director will coordinate research centers in specific environmental areas and the UC Davis Natural Reserve System, promote effective environmental outreach programs, and work with federal, state, and regional agencies to develop a cross-disciplinary approach to environmental management. The Director will also advise the Provost and the Deans on resource allocations for campus-wide programs centered on the environment.

Qualifications: We seek an outstanding and experienced individual, primarily from the biological or physical sciences, who qualifies for a tenured appointment at the Full Professor level. A Ph.D. degree or the equivalent is required. The directorship will be an 11-month appointment for a five-year term (renewable). The director will also have an academic appointment in an appropriate academic unit at UC Davis.

Nominations and Applications: Applicants should submit a curriculum vitae, copies of relevant publications, and a statement describing the applicant's vision on research, education and outreach programs of the John Muir Institute of the Environment. Applicants should also provide the names, addresses, and phone numbers of four persons who have agreed to write letters of reference. Nominations and complete applications should be sent to: Associate Vice Chancellor André Läuchli, Chair of the Search Committee, Office of the Vice Chancellor for Research, Mrak Hall, University of California, One Shields Avenue, Davis, California 95616-8671. This position is open until filled, but to ensure consideration, nominations and applications should be received by January 15, 2000. This position is available July 1, 2000.

ASSOCIATE DEAN FOR THE DIVISION OF ENVIRONMENTAL SCIENCES

The College of Agricultural and Environmental Sciences invites nominations and applications for the position of Divisional Associate Dean for the Environmental Sciences, encompassing the departments of Land, Air and Water Resources; Environmental Toxicology; Environmental Science and Policy; Wildlife, Fish and Conservation Biology; and Landscape Architecture. The Division, with 90 faculty members and numerous undergraduate and graduate academic programs, is the focal point for College environment programs and integrates with campus programs in the College of Letters and Science, the College of Engineering, the Division of Biological Sciences, and the Schools of Medicine, Veterinary Medicine and Law. The Division also interfaces with the recently established John Muir Institute of the Environment.

The Divisional Associate Dean will provide academic and administrative leadership for the Environmental Sciences Division. S/he will be a member of the College leadership team and will lead planning and administrative coordination of the departments and programs of the Division, in conjunction with Associate Deans for the Division of Agricultural Sciences and the Division of Human Sciences. The Divisional Associate Dean works with department chairs and faculty to develop programmatic priorities in teaching, research, and outreach that determine resource and FTE allocations and s/he provides leadership to recruit, advance and retain excellent faculty. The Divisional Associate Dean will represent divisional programs to external clientele and other colleges and schools. The Divisional Associate Dean works with the Cooperative Extension Specialists and the appropriate Cooperative Extension programs in the University's Division of Agricultural and Natural Resources to promote outreach programs relevant to the State of California.

Qualifications: We seek an outstanding and experienced individual from the biological or physical sciences who qualifies for a tenured appointment at the Full Professor level. A Ph.D. degree is required. Candidates must possess leadership ability and interpersonal skills to forge strong collaborations with other deans, center directors and department leaders to advance College and campus programs. Experience with academic and budgetary planning is essential. The Associate Dean position will be an 11-month appointment for a five-year term (renewable). The Associate Dean also will have an academic appointment in an appropriate department in the College and will be expected to maintain an active research program.

Applications: Applicants should submit a resume, copies of relevant publications and manuscripts, a statement of interest and the names and addresses of four references to: Executive Associate Dean James MacDonald, College of Agricultural and Environmental Sciences, University of California, One Shields Ave., Davis, CA, 95616. This position is open until filled, but to ensure consideration, applications should be received by January 15, 2000.

The University of California, Davis is committed to building a more diverse faculty, staff and student body, as it responds to the changing population and educational needs of California and the nation. The University of California is an equal opportunity/affirmative action employer.



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THE R.W. JOHNSON PHARMACEUTICAL RESEARCH INSTITUTE

The R.W. Johnson Pharmaceutical Research Institute, located in Raritan, New Jersey, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology and oncology.

Scientists

Bioanalytical

In this role, you will provide bioanalytical support for in vitro and in vivo assays to screen drug absorption and metabolism properties. Qualified candidates will have an MS in chemistry or biochemistry and a solid background in LCMS. You must have strong computer knowledge and excellent creativity, analytical, problem-solving and communication skills. **Req. Code 11888SCI**

Toxicity Screening Assays

Performing in vitro screening assays to analyze toxicity in preclinical drug development, your primary duties will include executing cell based assays; assessing assay results; writing reports; and developing novel assays.

The Scientist will have a Ph.D. in cell biology, biology, biochemistry, pharmacology or a related discipline and a strong background in cell culture techniques and in tracking cell function using biochemical and molecular approaches. You must have a solid publication record and excellent teamwork and communication skills. Req. Code 11887SCI

The Senior Associate Scientist will have a BS or MS in biology, cell biology, biochemistry or a related discipline and a strong background in cell culture techniques or performing biological assays. Excellent scientific problem-solving, computer and communication skills are a must. Req. Code 11886SCI

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. Please forward a resume, noting Req. Code, to: R.W. Johnson Pharmaceutical Research Institute, Attn: Gerry Scott-Higgins, 920 Route 202, Raritan, NJ 08869 or email: gscotthi-@prius.jnj.com. NO PHONE CALLS PLEASE. We are an equal opportunity employer totally committed to diversity.

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MYRIAD GENETICS, INC.

Myriad Genetics has established itself as a leader in the discovery of human disease genes by using a powerful combination of positional cloning techniques and the foremost informatics and high-throughput sequencing capabilities. To expand its efforts in novel gene and drug target identification, Myriad Genetics has set up the Pro NetTM program.

The Pro NetTM program provides researchers with a comprehensive map of protein-protein interactions that is an invaluable tool for the elucidation of pathogenic pathways leading to human disease. This ambitious project involves the application of various automation technologies to the discovery of these interactions. Expansion of our Pro NetTM gene identification and characterization efforts provides the following exciting opportunities for highly motivated individuals.

SEQUENCE ANALYSTS

In this position, you will play a key role in manual and automated analysis of molecular sequence data from high-throughput protein-protein interaction searches. You must have a BS or MS in Biology or a related field and relevant computer experience. Familiarity with molecular sequence databases, search algorithms, assembling molecular sequence data, and Sybase/SQL is preferred.

RESEARCH SCIENTISTS

In this position, you will lead projects that apply the high-throughput identification of protein-protein interactions to the discovery and analysis of human disease genes. Expertise in molecular biology methodologies, including two-hybrid, and analysis of protein function is preferred. Candidates should have a Ph.D. in the biological sciences and 2+ years of relevant post-doctoral experience. Excellent communication and organizational skills are essential.

We offer an attractive compensation package and a stimulating, interactive research environment. Situated in the foothills above Salt Lake City, you'll enjoy breathtaking views at work and an incredible lifestyle away from the office. It also features an endless array of summer and winter outdoor activities. Find your future in Utah with Myriad.

Please mail or fax your letter of interest and include a complete resume and the names of three professional references to: Human Resources Department, Myriad Genetics, Inc., 320 Wakara Way, Salt Lake City, UT 84108. Fax: 801.584.1144

We are an Equal Opportunity Employer. To learn more about Myriad Genetics, please visit our web page at www.myriad.com

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Watson School of Biological Sciences

A New & Innovative Ph.D. Program

In September 1999, Cold Spring Harbor Laboratory began a new Ph.D. program in the biological sciences at the recently established Watson School of Biological Sciences. This innovative program provides an exciting and intensive educational experience aimed at training future leaders in science and society. The training each student receives is designed to produce Ph.D. graduates who think critically and independently, and who communicate clearly and effectively.

The curriculum takes advantage of the unique and flexible environment of Cold Spring Harbor Laboratory and includes the following features:

- a four-year program
- a first year with course work and laboratory rotations in separate phases
- continued advanced course instruction
- emphasis on scientific reasoning and logic
- a two-tier mentoring system.

ELIGIBILITY The program is open to students of outstanding academic ability. Applicants must have received a Bachelor of Arts or Science or equivalent degree from an accredited university or college, prior to matriculation. Selection for admission will be based on the perceived ability of the student to excel in this doctoral program. There are no nationality requirements; our aim is for a diverse student body.

STUDENT SUPPORT The Watson School of Biological Sciences will provide students with a stipend, tuition costs, health insurance, subsidized housing and research support.

HOW TO APPLY Application forms and information about the program and its faculty are available from our Web site www.cshl.org/gradschool or by contacting:
Watson School of Biological Sciences
Cold Spring Harbor Laboratory
One Bungtown Road
Cold Spring Harbor, NY 11724, USA.
Tel. 516/367-6890, Fax: 516/367-6919
Email: gradschool@cshl.org

The deadline for receipt of completed applications is January 1, 2000; late applications may be considered.

A GRADUATE PROGRAM UNLIKE ANY OTHER...AT A PLACE UNLIKE ANY OTHER

ANNOUNCEMENTS

AMERICAN MUSEUM OF NATURAL HISTORY FELLOWSHIPS AND GRANTS

FELLOWSHIPS - Research Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 2000. The fellowships support independent research in association with the resident staff. Areas include vertebrate and invertebrate zoology, paleozoology, anthropology, earth and planetary sciences and astronomy. All fellowship applications, including Chapman (Ornithology), should be postmarked by January 15, 2000.

GRANTS - Research grants are available to advanced predoctoral candidates and recent postdoctoral researchers in the fields of zoology and paleontology. Awards average \$1,400.00.

Postmark dates vary for each grant program:

Frank M Chapman (Ornithology) - January 15, 2000

Theodore Roosevelt (North American Fauna) - February 15, 2000

Lerner-Gray (Marine Zoology) - March 15, 2000

Request information and application forms from:

American Museum of Natural History Office of Grants and Fellowships Central Park West at 79th Street New York, NY 10024 E-mail: rnavarro@amnh.org

1999-2000 Weizmann Women & Science Award

Call for Nominations

The American Committee for the Weizmann Institute of Science invites nominations for the 2000 Biennial Women & Science Award. Established in 1994, the Award will be given to an outstanding woman who has made significant contributions to the scientific community. The objectives of the Award, which includes a \$25,000 research grant to the recipient, are to recognize distinguished achievement and to provide a more valuable role model to motivate and encourage the next generation of young women scientists, engineers and mathematicians.

Nominees may represent any discipline in the natural sciences, and may be conducting research in either the public or private sector.

To request a nomination application, please call Liz Jaffe, Director of National Programs, American Committee for the Weizmann Institute of Science, 212-779-2500. The nomination application must include background documentation, i.e. curriculum vitae, as well as a supporting statement by the nominator. Nominations must be postmarked by January 28, 2000 and sent to Women and Science Award, ACWIS, 130 E. 59th Street, New York, NY 10022, or by fax to 212-779-3209 or by email: liz@acwis.org.

Past recipients of the award are:

1994 - Dr. Joan Argetsinger Steitz, Henry Ford II Professor of Molecular Biophysics and Biochemistry at Yale University; Investigator of the Howard Hughes Medical Institute.

1996 - Dr. Vera Rubin, Observational Astronomer, Department of Terrestrial Magnetism, Carnegie Institution, Washington, D.C.

1998 - Dr. Jacqueline K. Barton, The Arthur and Marian Hanisch Memorial Professor of Chemistry, California Institute of Technology, Pasadena, California.

The Award presentation is scheduled to take place at the New York Academy of Sciences on Tuesday, June 6, 2000.



At Hoffmann-La Roche, our passion for discovery is surpassed only by our pledge to help people live longer, healthier lives. This commitment to new product development has made us one of the most revered pharmaceutical companies for over

a century.

Hoffmann-La Roche, Inc. is in the midst of one of the most exiting periods in our 100-year history. Groundbreaking research into AIDS, cancer, obesity and other areas will pave the way for millions to lead better, more productive lives. And in order to speed the process from discovery to actual delivery of our therapeutic agents, we are seeking an individual to play a key role in supporting the drug development process from clinical trials to FDA approval.

MEDICAL WRITER

Working closely with Clinicians, Statisticians, and other project team members in our Nutley, NJ location, you will be responsible for preparing and managing content, format and production of NDA and related documents. To qualify, you must have an advanced degree in a scientific discipline, the ability to synthesize and explain complex technical data, knowledge of standard business software applications, and either 4+ years of NDA document preparation experience or a postdoctoral fellowship which includes publications.

As one of NJ Monthly's "Best Companies to Work for in New Jersey," we offer our employees competitive salaries and a comprehensive benefits package, including a state-of-the-art fitness center and onsite childcare. For consideration, forward your resume, citing Job #99-000-1351DG, to: Hoffmann-La Roche, Inc., R&D Human Resources, 340 Kingsland Street, Nutley, NJ 07110; Fax: 973-235-2767; E-mail: nutley.research@roche.com. We are an equal opportunity employer fully committed to diversity in the workplace.

For more information, visit our web site at www.RocheUSA.com.



BASIC SCIENCE ORTHOPAEDIC RESEARCH

The Department of Orthopaedic Surgery and Rehabilitation at the University of Nebraska Medical Center is seeking a Ph.D. faculty person at the Assistant or Associate Professor level to help develop a new program in Orthopaedic Research. This new research effort has been made available by endowed funds to the University. The candidate is expected to conduct investigations into the molecular biology of joint disease and related tissue. Novel approaches for therapy will be encouraged. Active programs in stem cell transplantation and gene therapy currently exist on campus and are available for collaboration.

The candidate must have demonstrated the ability to develop independent funded research as reflected by peer reviewed grants and publications. Generous start-up funds and a very competitive salary are available. The University of Nebraska Medical Center is an equal opportunity employer.

Interested applicants should submit their curriculum vitae to:

Kevin L. Garvin, M.D.

Department of Orthopaedic Surgery & Rehabilitation
University of Nebraska Medical Center
981080 Nebraska Medical Center
Omaha, NE 68198-1080

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OSI Pharmaceuticals, Inc. is an integrated drug discovery company with a mission to discover and develop novel pharmaceutical products. OSI has become a leader in the field of small molecule drug discovery by combining automated high-throughput screening using industry-pioneering robotics with sophisticated molecular biology, biochemistry and cell biology.

OSIP has openings at the Tarrytown, NY facility in the following area:

<u>RESEARCH ASSOCIATES</u>

We are looking for BS/MS scientists with a minimum of 1-2 years lab experience with strong background in molecular biology, mammalian cell culture, receptor signal transduction research and gene expression, to join our diabetes group. Qualified individuals will work within the drug discovery group, exploring cellular signaling pathways and working with projects involving novel whole cell assay systems for G-protein coupled receptor signaling and diabetes targets.

OSI Pharmaceuticals offers a superb benefits package, including 3 weeks vacation, stock options, 401(K) and opportunities for career development. Qualified candidates may send resume to: Director, Human Resources, OSI Pharmaceuticals, Inc., 106 Charles Lindbergh Boulevard, Uniondale, NY 11553; FAX: (516) 222-0114; e-mail: employment@osip.com. Equal Opportunity Employer M/F/D/V.

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Clinical Director

Intramural Research Program National Institute of Arthritis and Musculoskeletal and Skin Diseases National Institutes of Health

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the National Institutes of Health (NIH) is seeking exceptional candidates to fill the position of Clinical Director in the Intramural Research Program (IRP) of NIAMS, NIH. We are interested in outstanding physician scientists with leadership skills to develop and implement innovative clinical research programs that take advantage of the unique resources afforded by the Intramural Research Program and the NIH Clinical Center. The successful candidate will be responsible for coordinating the exciting clinical research programs in the IRP relating to the broad field of rheumatologic, musculoskeletal, and/or skin disorders.

Candidates must have an M.D. degree, licensure as a physician, completed an accredited residency program, board eligibility in rheumatology, orthopaedic surgery, or dermatology, and have substantial experience initiating and directing translational research programs. Salary and resources will be commensurate with the qualifications and experience of the candidate.

Applicants should submit curriculum vitae, bibliography, statement of research interests, and the names of three references to:

Dr. Peter Lipsky

c/o Scott Sigley, NIAMS, HRMB Building 31, Room 4C13 31 Center Drive, MSC 2350 Bethesda, MD 20892-2350 or E-mail SS403P@nih.gov

Applications must be postmarked by 11/30/99

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Department of Pharmacology & Experimental Therapeutics

The Department of Pharmacology and Experimental Therapeutics seeks to fill a position of Assistant or Associate Professor (tenure track). Areas of particular research interest include pharmacogenetics, neuropharmacology, pharmacokinetics, drug metabolism, and neuropeptides. Current and ongoing extramural research funding is required and teaching experience is desirable.

Candidates should send a curriculum vitae and statement of current research interests and support, together with names of three references, to:

Richard I. Shader, M.D. Tufts University School of Medicine 136 Harrison Avenue Boston, MA 02111.

Tufts is an Affirmative Action/Equal Opportunity Employer and actively seeks candidates from diverse backgrounds. The College of Oceanic & Atmospheric Sciences (COAS) at Oregon State University announces the availability of a tenure track position in marine geology/nearshore processes oceanography at the assistant/associate professor level. The appointee will be expected to develop and maintain a vigorous, externally funded research program, to interact with faculty colleagues and graduate students, and to participate in the teaching program of COAS.

Essential qualifications include a Ph.D. in oceanography or a closely related field, a record of significant and exciting research, and the clear potential to attract external funding. Candidates should be familiar with and be able to teach nearshore fluid and sediment transport processes at the graduate level. Desirable qualities include: strong data analysis capabilities including the ability to formulate and test hypotheses using state-of-the-art analysis techniques and large data sets; experience with understanding and modeling of nonlinear dynamical system approaches; experience with the linkages between small-scale processes and the large-scale behavior of systems ranging from nearshore morphodynamics to global climate; enthusiasm for the application of coastal science to societal issues such as erosion, coastal management and coastal hazards; an interest in interacting with the Marine Resource Management program. Salary will be commensurate with qualifications. Starting date is anticipated to be Summer 2000, but is negotiable.

COAS is one of the leading oceanographic graduate research institutions in the country with more than 200 faculty and staff, and a wide variety of analytical and oceanographic facilities, including excellent computing facilities, modern analytical laboratories, and two research vessels. OSU is located in an area known for its beauty and quality of life. For more information about the College, OSU, Corvallis, and the environment please consult our web page at http://www.oce.orst.edu.

Applications should consist of a letter of interest referencing position 005-492, a current curriculum vitae that includes a description of current research interests, funding history, a list of publications, and the names and addresses of at least five references to: G. Brent Dalrymple, Dean, College Of Oceanic & Atmospheric Sciences, Oregon State University, 104 Ocean Admin Bldg, Corvallis, OR 97331-5503. For full consideration apply by 30 December 1999. Position will be open until filled. Inquiries about the position may be directed to Dr. Rob Holman by phone (541-737-2914), electronic mail (holman@oce.orst.edu) or by FAX (541-737-2064). OSU is an AA/EEO employer and has a policy of being responsive to the needs of dual career couples.

ASSOCIATE SCIENTIST

Biogen, Inc., winner of the 1998 National Medal of Technology®, has established a unique record of success as one of the world's premier biopharmaceutical companies. Pioneering research by our scientists has led to the introduction of several important new medical therapies, including AVONEX® (Interferon beta-1a), the most prescribed therapy in the U.S. for relapsing forms of multiple sclerosis. We are staking our future growth on

the development of our next generation of pharmaceutical products, five of which are currently being tested in human clinical trials. Today we are seeking a highly motivated and experienced individual to join our expanding team in Cambridge, Massachusetts.

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Responsible for investigating the function of novel genes and their therapeutic potential. Candidates should possess a BS or MS and at least 3 years industry or academic experience. Experience in tissue culture, isolation of primary cells, DNA constructs, mammalian/bacterial cell protein expression, immunoprecipitation, RNA preparation, Northern and Western blot analysis, immunohisto chemistry or in situ and animal handling is desired.

Biogen has an outstanding record of leadership and accomplishment in the biotechnology field. We have one of the strongest financial profiles in the industry and our compensation and benefits package, including equity participation, is unmatched. We've created an environment designed to attract and retain the world's most accomplished talent, and we invite you to forward your resume to: Biogen, Inc., Attn: Human Resources, Source Code: LL2, 14 Cambridge Center, Cambridge, MA 02142; Fax: (617) 679-2546; Email: resumes@biogen.com (Source Code ONLY must appear in the subject line). Biogen is an Equal Opportunity Employer. No phone calls, please.



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Postdoctoral Training Opportunities in Structural Biology/Biomolecular NMR

St. Jude Children's Research Hospital in Memphis, Tennessee (www.stjude.org), a premier center for cancer and biomedical research, is in the process of a \$1 billion expansion. As a consequence, two postdoctoral positions are available in The Department of Structural Biology (www.stjude.org/departments) with emphasis on Protein Structure Determination by NMR. This Department offers interdisciplinary training in all aspects of structural biology and embraces the emerging fields of bioinformatics, proteomics and structural genomics. Openings are available in the following areas:

Dr. Stephen White (stephen.white@stjude.org) is working on proteins and protein-nucleic acid complexes involved in replication, transcription and translation.

Dr. Richard Kriwacki (richard kriwacki@stjude.org) studies the molecular mechanisms of tumor suppressors and oncogenes.

Applicants should have experience or seek training in: biomolecular NMR, bio-interaction studies (BIACORE), molecular biology, and/or protein expression & purification. State-of-the-art equipment for NMR spectroscopy (2 Varian INOVA 600 spectrometers), X-ray crystallography (2 Nonius X-ray systems) is located within the Department. We seek recent graduates interested in receiving training at the forefront of biomedical research.

St. Jude offers a competitive benefits package including medical and dental coverage, relocation supplementation and a yearly professional development allotment. Please contact individual faculty members by e-mail or by mail at: **Department of Structural Biology**, **St. Jude Children's Research Hospital**, **332 North Lauderdale**, **Memphis**, **TN 38105**. AA/EOE

Distinguished Fellowship

Lawrence Livermore Postdoctoral Fellowship

The Lawrence Livermore National Laboratory Director has established a Lawrence Livermore Postdoctoral Fellowship. This is a highly desirable, prestigious position with ample resources and freedom to conduct cutting edge research in the fields of the candidate's choice. Duration for the Fellowship is up to three years. Two openings are immediately available, and two additional positions will be available every year to a maximum of six. Fellowships are awarded only to candidates with exceptional talent, credentials, and a track record of research accomplishment.

Candidates will do original research in one or more aspects of science relevant to the mission and goals of LLNL which include: Physics, Computational Mathematics, Computer Science, Chemistry, Material Science, Engineering, Environmental Research, Atmospheric Science, Geological Sciences, Energy, Laser Science, and Biological Science. Successful candidates may participate in experimental or theoretical work at LLNL, and will have access to LLNL's extensive computing facilities, specialized laboratory facilities, and field equipment. A senior scientist will serve as a mentor to each of the Fellows. The candidates will receive full management and administrative support. The salary is \$6000/mo.

Please refer to our web page http://www.llnl.gov/urp/LLNLPostDoc/LLNLPostDoc.htm for eligibility requirements and application information. Please reference source code AJSCBC9AD. The deadline for application is Dec. 30, 1999. No applications will be accepted after this date. Lawrence Livermore National Laboratory is operated by the University of California for the U.S. Department of Energy.

LLNL is an equal opportunity employer with a commitment to workforce diversity.

University of California



POST-DOCTORAL FELLOWSHIPS IN CELLULAR AND MOLECULAR IMMUNOLOGY NATIONAL CANCER INSTITUTE

Immediate openings exist for full-time Post-Doctoral Fellowships in the Tumor Immunology Section, Surgery Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, to study the immune response to tumors in humans.

We seek candidates with experience in cellular or molecular immunology. A background in immunology is essential. Ongoing projects include the identification of new tumor-associated antigens, the study of immune tolerance to tumor-associated differentiation antigens and the development of synthetic and recombinant anticancer vaccines. Another project aims to study immune responses in breast cancer and requires a background in culture of fresh human breast cancers.

Selections of these positions will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation or membership or non-membership in an employee organization.

Send cover letter, resume, and statement of research interests to:

Steven A. Rosenberg, M.D., Ph.D. Chief of Surgery National Cancer Institute National Institutes of Health Building 10, Room 2B42 Bethesda, Maryland 20892-1502 EMAIL: SAR@nih.gov

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Postdoctoral Positions Molecular Oncology Program

Postdoctoral applicants are being accepted for the Molecular Oncology Program at the Fox Chase Cancer Center. The laboratories that comprise the Molecular Oncology program study a range of topics relevant to the control of cell survival, proliferation, and malignant transformation. Current subject areas include, but are not limited to, signal transduction, oncogenes and tumor suppressors, cell cycle control, apoptosis, and DNA replication, repair and stability. The faculty and their research interests are described below. Candidates with a recent MD or PhD and previous experience in molecular and cellular biology are encouraged to apply

- P. Adams Cell Cycle Regulated Transcription and Chromatin Assembly in Mammalian Cells.
- Bellacosa Role of DNA repair genes in human cancer. Cairns Basic and Translational Work in Molecular Genetics of Urological and Female Cancer.
 Chernoff - Signal transduction in cell morphogenesis.
- T. Coleman Cell cycle control in Xenopus egg extracts. E. Henske Functional analysis of the Tuberous Sclerosis tumor suppressor genes. Klein - Szanto - Molecular mechanisms of tumor progression
- G. Kruh Role of the Arg tyrosine kinase in brain development; molecular mechanisms of resistance to anticancer agents.
- Murphy p53, transcriptional repression and apoptosis.

 C. Patriotis Changes in signaling pathways and in gene expression patterns during malignant transformation.

 J. Testa Tumor genetics; functional analysis of the AKT2 oncogene.

 D. Broccoli Mammalian telomere dynamics in aging and tumorigenesis.

 J. Russo relation of new mismatch repair genes with cell immortalization and transformation.

Applicants should submit a CV and the names of three references to one of the faculty above. Please contact investigators at: Program in Molecular Oncology, Fox Chase Cancer Center, c/o Human Resources, 7701 Burholme Avenue, Philadelphia, PA 19111. For more information, see http://www.fccc.edu/postdoc/departments/moloncol/index.html.



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Courses & Training



2000 Summer Research Fellowships

This fellowship covers costs of conducting Full Fellowship summer research, plus living and travel expenses:

Nikon, Inc. Fellowship - Any area of biological sciences requiring the use of advanced microscopy

Josiah Macy, Jr. Research Fellowship - Provides funds for three minority research faculty scientists

Partial Fellowship These fellowship funds may be available individually or in concert to cover many of the costs of conducting summer research, including living and travel expenses, in the following areas:

Robert Day Allen Fellowship - Cell motility and cytoarchitecture

Frederick B. Bang Fellowship Fund - For research using marine models in molecular biology or biomedicine

Frank A. Brown, Jr. Memorial Readership - Covers fees for desk rental & full privileges in MBL/WHOI Library

Charles R. Crane Fellowship Fund - Independent research in any area

John O. Crane Fellowship Fund - Independent research in any area

Jean and Katsuma Dan Fellowship Fund - Independent research in any

Erik B. Fries Fellowship - Covers laboratory or library expenses

M.G.F. Fuortes Fellowship - Neuroscience

Ann E. Kammer Fellowship Fund - For women researchers, with a preference for neuroscience

Fred Karush Endowed Library Readership - Covers fees for desk rental & full privileges in MBL/WHOI Library

Stephen W. Kuffler Fellowship - Neurobiology

Lucy B. Lemann Fellowship - Research in any area

Frank R. Lillie Fellowship - Provides a research laboratory and funds for travel and supplies

MBL Associates Fellowships - Research in any area

MBL Research Fellowships - Research in any area

James A. and Faith Miller Memorial Fund - Any area, with developmental biology preferred

NASA Life Sciences Program Fellowships - Research related to the mission of the NASA Life Sciences Program

William Townsend Porter Fellowship for Minority Investigators -Research in any area of physiology

Herbert W. Rand Fellowship - Research in any area (MBL Director's Discretion)

The Evelyn and Melvin Splegel Fellowship Fund - Any area, developmental biology preferred

H.B. Steinbach Fellowship - Cell biology and physiology

Application Deadline for Fellowships is January 15, 2000 Applications are reviewed by the MBL Fellowship Committee. Notification of decisions will be malled by March 15.

For application forms and additional information, please contact: Fellowship Coordinator, Office of Research Administration Marine Biological Laboratory, 7 MBL Street Woods Hole, MA 02543 Tel: 508-289-7441 / Fax: 508-457-1924 E-mail: skaufman@mbl.edu / internet: www.mbl.edu

The MBL is an EEO/Affirmative Action Institution

FACULTY POSITIONS Department of Physiological Sciences Eastern Virginia Medical School

The Department of Physiological Sciences at Eastern Virginia Medical School seeks highly qualified applicants for tenure-track positions at the rank of ASSISTANT/ASSOCIATE PROFESSOR. Salaries are competitive and commensurate with experience and initial support for laboratory and research program development is outstanding. The department is comprised of three divisions: biochemistry, physiology, and pharmacology. Departmental research is centered in cardiovascular sciences as well as cell and reproductive endocrinology and include faculty with funded programs to study the molecular mechanism and regulation of smooth/striated muscle contraction, intracellular signaling, hormonal regulation of gene expression, glycobiology and reproductive/perinatal medicine. Applicants using modern molecular and/or biophysical/biochemical methods to study contemporary biochemical and physiological problems will be considered with preference given to those with research interests that complement and foster interactions with existing faculty. Applicants with a Ph.D. and/or M.D., at least two years postdoctoral experience, and demonstrated potential to develop/maintain a peer-reviewed research program will be considered, with preference for those with current extramural funding. New faculty will also participate in team-taught courses for medical students and train students in M.S. and Ph.D. programs. One of the successful candidates should have a background that will enable him/her to participate in team-taught courses in biochemistry and molecular biology to first-year medical students. Curriculum vitae, summary of current/future research, and names of three or more references should be sent by December 31, 1999, to: Professor Howard White, Faculty Search Committee Chair, Department of Physiological Sciences, Eastern Virginia Medical School, Lewis Hall, 700 Olney Road, Norfolk, VA 23507. Eastern Virginia Medical School is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Two full-time, non-tenure stream FACULTY PO-SITIONS, at the Instructor level, are available immediately in the Department of Anesthesiology, University of Pittsburgh School of Medicine. Successful candidates will join ongoing, NIH-funded research programs with the goal of becoming independent investigators. Educational requirement: Ph.D. degree or equivalent. Individuals with interest and training in one of the following areas are encouraged to apply: (1) protein structure determination by high-resolution or solid-state NMR; (2) large scale molecular dynamic simulation of biological macromolecules (particularly membrane-associated proteins); and (3) in vivo NMR spectroscopy and imaging. Competitive benefits package. Salary is commensurate with experience. Please submit curriculum vitae, a concise statement of research interests, and three letters of recommendation to: The Search Committee, Attn: Dr. Yan Xu, W-1358 Biomedical Science Tower, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261. E-mail: xu2@imap.pitt.edu. Curriculum vitae will be accepted until the positions are filled. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer

BIOLOGY (PLANT/GENERAL) FACULTY. Tenure-track position available fall, 2000 for a plant biologist to teach plant biology, general biology, ecology, and field biology. Interested individuals with a strong commitment to liberal arts education, demonstration of teaching excellence, and ability to lead undergraduate research should send their curriculum vitae, a statement on teaching philosophy, a statement on research interests, and the names of three references to: Dr. Richard Wilson, Department of Biology, Rockhurst University, 1100 Rockhurst Road, Kansas City, MO 64110; e-mail: <ri>crichard. wilson@rockhurst.edu>. Review of materials wil begin December 15, 1999. Rockhurst University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION FUNCTIONAL GENOMICS

As part of an ongoing expansion, the Department of Cell Biology and Molecular Genetics at the University of Maryland at College Park invites applications for a tenure-track faculty member conducting research on fundamental problems in gene function that develops or makes use of innovative technology. The rank for this appointment is open. Applicants must have an earned doctorate degree in an appropriate area of biology, relevant postdoctoral experience, evidence of significant research accomplishments and a commitment to excellence in teaching. Salary is competitive and commensurate with experience. Senior candidates will be expected to have attained national and international stature. The successful applicant will be expected to direct competitively funded research. College Park is the flagship campus of the University of Maryland System, and is located in the Washington, D.C. area adjacent to numerous government and biotechnology institutions. All faculty members of the Department participate in the instructional programs at both the undergraduate and graduate levels. Additional information about the Department can be found at our website: http://www. life.umd.edu/CBMG. Applications should be received by January 7, 2000 to receive full consideration, but the search will continue until the position is filled. Materials, including a letter of application, curriculum vitae, statements of research and teaching interests, and the names and addresses of three references should be directed to:

Dr. Stephen M. Mount, Chair Functional Genomics Search Committee Department of Cell Biology and Molecular Genetics H. J. Patterson Hall University of Maryland College Park, MD 20742

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

INVERTEBRATE ZOOLOGY FACULTY POSITION Department of Biological Sciences Humboldt State University

A full-time tenure-track position is available for fall, 2000. Requires Ph.D. in biological sciences with specialty in marine invertebrates. Emphasis on morphology, systematics, or ecology of invertebrates preferred. Primary teaching responsibilities will include invertebrate zoology at the university's marine laboratory, and introductory zoology on the main campus. Other duties will involve advising undergraduate students and Master's degree candidates and serving on faculty committees. Recent teaching experience is essential. Research is expected. Send résumé, three letters of recommendation, and undergraduate and graduate transcripts to: Chair, Invertebrate Zoology Search Committee, Department of Biological ciences, Humboldt State University, Arcata, CA 95521. Telephone: 707-826-3245; FAX: 707-826-3201; e-mail: turner@laurel.humboldt.edu. Completed application materials must be postmarked by January 10, 2000. Equal Opportunity/Affirmative Action Employer. Women, persons with disability, and minorities are encouraged to apply.

VICE PRESIDENT FOR RESEARCH, CREATIVE ACTIVITIES, AND TECHNOLOGY TRANSFER North Dakota State University

North Dakota State University in Fargo, North Dakota, invites inquiries, nominations, and applications for the position of Vice President for Research, Creative Activities, and Technology Transfer to begin service on July 1, 2000. Screening will begin December 3, 1999, and continue until the position is filled. For more information including responsibilities, qualifications, and application procedures for this position visit our website: http://www.ndsu.nodak.edu/administration/president/vp_research or e-mail: chpeters@badlands.nodak.edu. North Dakota State University is an Equal Opportunity Institution.

POSITIONS OPEN

IMMUNOLOGY FACULTY POSITIONS Vaccine and Gene Therapy Institute Oregon Health Sciences University

The Oregon Health Sciences University (OHSU) is inviting applications for three tenure-track ASSIS-TANT/ASSOCIATE PROFESSOR positions to join Dr. Louis J. Picker in the Vaccine Program within the new Vaccine and Gene Therapy Institute. Candidates must have a Ph.D. and/or M.D. degree and have a strong record of research achievement in immunology. Individuals are sought with expertise in immunologic memory, T cell effector mechanisms, immunologic tolerance, dendritic cells, and/or immunity towards chronic pathogens, particularly HIV, Hepatitis C, Herpes family viruses, or M. tuberculosis. Preference will be given to applicants with experience and/or interest in human and nonhuman primate systems.

The Vaccine Program of OHSU Vaccine and Gene Therapy Institute is dedicated to the understanding of the human immune response to chronic pathogens and the development of new strategies for vaccine design and nonhuman primate models of chronic infectious disease. The Vaccine Program will be located in a new, over-20,000-square-foot building at the Oregon Regional Primate Research Center and will have at its disposal Biosafety Level Three facilities for handling infectious agents, as well as state-of-the-art equipment and core facilities. The immunology/microbiology community at OHSU consists of a collaborative group of over 40 scientists with primary appointments in both basic and clinical departments and participation in two NIH-funded training programs for both doctoral students and post-doctoral fellows.

Applicants should submit a current curriculum vitae, statement of research plans, and names of three references by February 15, 2000, to:

Dr. David C. Parker Chair, Search Committee Department of Molecular Microbiology and Immunology, L220 Oregon Health Sciences University 3181 Southwest Sam Jackson Park Road Portland, Oregon 97201-3098

WILDLIFE ECOLOGIST, Department of Fish and Wildlife Resources, University of Idaho, Moscow. Academic-year, tenure-track assistant professor position (45 percent teaching, 45 percent research, 10 percent student advising). The successful candidate must have Ph.D. in wildlife or related field and demonstrate research productivity and potential as an effective teacher. Applicants whose research encompasses issues of spatial scale and habitat related to ungulate ecology are especially sought. For more information see website: http://www.uidaho.edu/ cfwr. Send letter of application, curriculum vitae, statement of teaching philosophy and research interests, and names of three references to: Dr. Kerry Reese, Search Committee Chair, Department of Fish and Wildlife Resources, University of Idaho, Moscow, ID 83844-1136; Telephone: 208-885-4006. Closing date: January 15, 2000. Equal Opportunity Employer/Affirmative Action.

FACULTY POSITION

The Department of Biochemistry and Molecular Biophysics and the Molecular Cardiology Program at the College of Physicians and Surgeons of Columbia University invite applications for a tenure-track faculty position. We are especially interested in outstanding scientists working on fundamental aspects of differentiation (e.g., heart muscle), or development involving studies of transcriptional regulation, signal transduction, or cytoskeleton in model organisms. Applicants should submit a curriculum vitae, a brief summary of current research and future objectives, and three letters of recommendation to: Dr. Max Gottesman or Dr. Andrew Marks, Search Committee, Department of Biochemistry and Molecular Biophysics, P&S 5-424, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR DIVISION OF ACQUIRED IMMUNODEFICIENCY SYNDROME

The National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) is recruiting for the position of Director, Division of Acquired Immunodeficiency Syndrome (DAIDS). The individual in this position has responsibility for a global biomedical research effort focused on HIV/AIDS, including basic sciences, therapeutics, vaccines, and other prevention strategies. He or she will provide scientific leadership to the research community, oversee a staff of approximately 120 employees in three major scientific programs, and administer an annual budget of over \$665 million. Salary negotiable. Applicants must hold either an M.D. or Ph.D. degree with research management experience in the biological, clinical and/or epidemiological aspects of infectious diseases. U.S. citizenship is required. Persons interested in this position may e-mail Dr. Tom Kindt, Chair of the Search Committee at tk9c@nih.gov. For more information on the application process, please contact Ms. Lynn C. Hellinger (see below). Applications should be submitted and postmarked no later than December 10, 1999 to:

Ms. Lynn C. Hellinger Director, Office of Human Resources Management, NIAID Building 31, Room 7A20 31 Center Drive MSC-2520 Bethesda, Maryland 20892-2520

Phone: 301-496-9686

NIH is an Equal Opportunity Employer

UNIVERSITY OF MINNESOTA DULUTH DEAN COLLEGE OF SCIENCE AND ENGINEERING

Responsibilities: academic leadership of the College; administration and development of programs and resources; development and maintenance of community relationships and effective fund-raising strategies; maintenance of administrative relationships at UMD and within the University of Minnesota system.

The successful candidate must be able to: provide leadership to the College and work effectively with the faculty, staff, student body, and administrators within the University; encourage and promote cultural and human diversity in the College's faculty, staff, students, and curricula; develop external relations to support the College's programs; and demonstrate successful fund-raising abilities.

Essential qualifications: earned doctorate in a collegiate or related discipline; tenurable in a CSE department as full professor; three years of administrative experience. Five or more years administrative experience is desired. Applicants must have a proven record of administrative leadership and managerial experience including budgeting, personnel, and human relations; exhibit excellent communication skills; demonstrate appreciation for teaching, basic and applied research, and outreach; and be committed to the development of interdisciplinary programs.

College of Science and Engineering has ten departments: Aerospace Studies, Biology, Chemical Engineering, Chemistry, Computer Science, Electrical and Computer Engineering, Geology, Industrial Engineering, Mathematics and Statistics, and Physics offering 25 undergraduate majors and minors, 9 Master of Science programs and a Master of Industrial Safety. It collaborates with the School of Medicine, the Natural Resources Research Institute, and the Large Lakes Observatory. CSE enrolls 2000 undergraduate and 125 graduate students, and has 90 regular faculty positions and 41 civil service and professional staff.

The starting date is July 1, 2000. The position of Dean is a full-time, 12-month position with an initial appointment of three years. Salary is competitive and commensurate with credentials and experience.

Applications must include a letter expressing interest, experience, and strengths; a current resume; a personal statement detailing the applicant's accomplishments and philosophy concerning diversity; and the names, addresses, phone numbers and email addresses of three references who may be contacted. The committee will begin its review of complete applications on December 1, 1999 and will continue until the position is filled. Completed applications must be submitted to:

CSE Dean Search Committee
265 A.B. Anderson Hall
University of Minnesota Duluth
10 University Drive
Duluth, Minnesota 55812-2496
Telephone (218) 726-7253; Fax (218) 726-6386; email csedean@d.umn.edu
http://www.d.umn.edu/cse

The University of Minnesota is an equal opportunity educator and employer.

VISITING FACULTY AND POSTDOCTORAL FELLOWSHIPS (2000-2001) University of Colorado at Boulder

The Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado at Boulder offers up to six one-year Visiting Fellowships to scientists with research interests in the areas of: physics, chemistry, biology and dynamics of the Earth System (atmosphere, biosphere, hydrosphere, lithosphere); global and regional environmental change; climate system monitoring, diagnostics, and modeling; remote sensing and in-situ measurement techniques for the earth system and interdisciplinary research themes. Awards may be made to Ph.D. scientists at all levels and faculty planning sabbatical leave. More information is available at website: http://cires.colorado.edu/cires.vf.html. By December 30, 1999, send cover letter, curriculum vitae and a two- to three-page description of the proposed research (postdoctoral level applicants must also submit undergraduate and graduate transcripts), and arrange for three letters of reference to be sent to: CIRES Visiting Fellows Program, Campus Box 216, University of Colorado, Boulder, CO 80309 USA. The University of Colorado at Boulder is committed to diversity and equality in education and employment. Recent Ph.D. recipients and those affiliated with minority institutions are especially encouraged to apply.

CENTER FOR DISCOVERY OF DRUGS AND DIAGNOSTICS (CD3) University of Central Florida

CD3 is dedicated to becoming a national leader in areas of research leading to new drugs and diagnostics. It is seeking to fill TENURE-TRACK POSI-TIONS at all levels beginning August 2000 in areas including computational chemistry or biology, NMR spectroscopy, biotechnology, and molecular biology. Successful candidates will have a Ph.D. and relevant postdoctoral experience. Preference will be given to applicants with established, independently funded research programs who are also willing to participate in collaborative and multidisciplinary approaches to developing new technology. Appointees will share the University's commitment to excellence in undergraduate and graduate teaching. Review of applications will begin January 3, 2000. Candidates should submit a curriculum vitae, a research plan including a summary of past accomplishments, and arrange for three letters of reference to be sent to: Dr. John Goodchild, Director, Center for Discovery of Drugs and Diagnostics, University of Central Florida, 12722 Research Parkway, Orlando, FL 32826-3227. As an agency of the State of Florida, UCF makes all application materials, including transcripts used in final screening, available to the public upon request. University of Central Florida is an Equal Opportunity/Affirmative Action Employer.

COMPARATIVE/EVOLUTIONARY PHYSIOLOGY

The Department of Zoology invites applications for a tenure-track position at the level of ASSISTANT **PROFESSOR**. Area of research is open (including physiological ecology, functional morphology, endo crinology, comparative biochemistry, and molecular biology), but relevance to organismal function and an evolutionary framework are expected. Teaching will include participation in introductory biology and an undergraduate lecture and laboratory course in Comparative Physiology. Information on the Department can be found at website: http://www.wisc.edu/zoology. Please send curriculum vitae, statement of research and teaching interests, copies of publications, and have three letters of recommendation sent to: Dr. Theodore Garland, Jr., Chair, Search Committee, Department of Zoology, 430 Lincoln Drive, University of Wisconsin–Madison, Madison, WI 53706. Telephone: 608-262-4437; FAX: 608-265-6320; E-mail: tgarland@facstaff.wisc.edu. Only applications submitted by mail will be accepted. Review of applications will begin 3 January 2000. Au Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

FACULTY POSITION CANCER GENETICS University of Minnesota Cancer Center

The University of Minnesota Cancer Center has established an endowed faculty position in cancer genetics. Outstanding individuals currently at the Assistant or Associate Professor levels are encouraged to apply. The individual will be named to the Schering Chair in Cancer Genetics, and will play a significant role in the expansion of the research program in molecular biology and the genetics of malignancy. The Cancer Center and Academic Health Center will devote competitive resources to the candidate and are committed to the growth of the Cancer Genetics Program through additional faculty recruitments. Modern laboratory space will be provided in the new Cancer Center Research Building, with access to state-ofthe-art core facilities in mouse genetics, flow cytometry, tissue procurement, analytical chemistry and biomarkers, cell therapy, and statistics. The candidate must have a Ph.D. or M.D. and a distinguished record of high quality research in molecular biology and genetics. There is a particular interest in solid tumors, although the search is not limited. Strong emphasis will be placed upon the candidate's ability to lead an externally-funded research program of national prominence, and the potential for interaction with other existing Cancer Center programs in Prevention and Etiology, Immunology, Cell Biology, and Transplant Biology. The appointment will be tenured in the appropriate University Medical School Department depending on qualifications. Please send a curriculum vitae, a brief research statement, and names of three references to: Chair, Schering Search Committee, c/o Jacqueline Sterling, Human Resources, University of Minnesota Cancer Center, Box 806, 420 Delaware Street Southeast, Minneapolis, MN 55455-0392. Applications will be reviewed immediately and accepted until February 1, 2000, or until the position is filled. The University of Minnesota is an Equal Opportunity Educator and Employer.

FACULTY POSITION ·

The Section of Rheumatology, University of Illinois at Chicago invites applications for a tenure-track faculty position. The candidate should be a board certified rheumatologist who will be expected to establish a funded program of health service research. Submit curriculum vitae to: John Varga, M.D., Chief, Section of Rheumatology, The University of Illinois at Chicago, 900 South Ashland (M/C 733), Chicago, IL 60607-7171. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

HUMANITIES AND SOCIAL SCIENCES IN ENGINEERING. The Division of Technology, Culture, and Communication in the School of Engineering and Applied Science at the University of Virginia seeks to hire a chairperson at the level of **FULL PROFESSOR**. Outstanding candidates may be eligible for an endowed professorship. Applicants must demonstrate significant research and teaching accomplishments in using approaches from the humanities and social sciences to investigate technology and science. For further details, see the full announcement at website: http://www.virginia.edu/~tcc_seas/facstaff/chair.html. Equal Opportunity/Affirmative Action.

GROWTH FACTOR SIGNAL TRANSDUCTION

A POSTDOCTORAL FELLOWSHIP is available to study the molecular signaling mechanisms utilized by the ErbB family of receptors (EGF receptor, ErbB2, ErbB3, ErbB4). For more information see *JBC:* **274**, 8900, 1999; *JBC:* **273**, 16643, 1998. Laboratory is located within the Center for Biologics Evaluation and Research on the NIH campus in Bethesda, Maryland. Experience in molecular biology, cell biology, and/or protein chemistry is required. Highly competitive salary commensurate with experience. Interested candidates should send their curriculum vitae and names of three references to: Dr. Gibbes Johnson, Division of Therapeutic Proteins, FDA/CBER, 1401 Rockville Pike, HFM-505, Rockville, MD 20852-1448. E-mail: johnsong@ cber.fda.gov.

POSITIONS OPEN

DIRECTOR **ENVIRONMENTAL STUDIES PROGRAM**

Washington and Lee University invites applications and nominations for Director of the Environmental Studies Program. The position is tenure-track at the Associate or Full Professor level, and will include programmatic responsibilities, scholarship, and a reduced teaching load. The successful candidate will have a doctorate, a distinguished record of scholarship and teaching, demonstrated success in interdisciplinary work, and an understanding of scholarship in science, policy, ethics, and humanities related to the study of environment. The University's renewed commitment to the sciences is demonstrated by a state-of-the-art science facility completed in 1998. With generous support from The Jessie Ball duPont Fund and a commitment from the University in its strategic plan, the Environmental Studies Program will enter a new phase in its development with the appointment of a director. The appointment will begin on July 1, 2000. Review of applications will begin December 15, 1999, and continue until the position is filled. Applicants should submit a letter of interest describing their qualifications and experience, a curriculum vitae, and the names, addresses, and telephone numbers of three professional references to:

Kenneth P. Ruscio, Associate Professor and Chair **Environmental Studies Search Committee** Washington and Lee University Lexington, VA 24450

Washington and Lee University is an Equal Opportunity Employer.

FACULTY POSITIONS BIOENGINEERING

The Bioengineering Program at Arizona State University seeks candidates for the Olin Endowed Chair at the rank of FULL PROFESSOR, and for two additional tenured or tenure-track faculty positions at ALL RANKS. Applicants for the Olin Chair must have national prominence in the field of molecular, cell or tissue engineering. Applicants for the other faculty positions must have expertise in neural engineering (i.e. the sub-discipline of bioengineering that includes application of engineering principles and methods in basic and applied neuroscience; development of devices and technologies which interface with the nervous system; or technologies related to neurosurgery, neurology, or neuroimaging), and/or in molecular, cell or tissue engineering (e.g. engineered biomaterials; molecular, cell, and tissue-based biohybrid devices; cell and tissue-engineered systems; and visualization and characterization of biological structure and function). For complete information on these faculty openings including detailed application procedures please contact either: Dr. Eric Guilbeau (e-mail: eric.guilbeau@asu.edu; Telephone: 480-965-3676); Chair of the Search Committee for the Olin Endowed Chair, or Dr. Jim Sweeney (email: james.sweeney@asu.edu; Telephone: 480-965-8708), Chair of the Bioengineering Faculty Search Committee; The Bioengineering Program, Box 876006, Arizona State University, Tempe, AZ 85287-6006. Arizona State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGICAL SCIENCES. The Department of Biological Sciences at York College of Pennsylvania is seeking a Biologist to teach undergraduate courses in biochemistry, cell biology, and introductory biology. The candidate must have a Ph.D., a record of successful teaching, and the ability to mentor undergraduates in research projects. The full-time, tenure-track position starts in August 2000. For information about the campus, visit website: www.ycp.edu. Please forward your curriculum vitae, a statement of your teaching philosophy, a description of how you would involve undergraduates in research, and three letters of recommendation to: Chair, Search Committee, Department of Biological Sciences, York College of Pennsylvania, York, PA 17405-1799. Review of applications will begin on December 1, 1999. York College of Pennsylvania is an Equal Opportunity Employer.



HOWARD HUGHES MEDICAL INSTITUTE

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel. Laboratory Positions:

- Postdoctoral Fellowships
- Research Specialists/Technicians
- Research Secretaries

Administrative Positions:

- Managers
- •Administrative Assistants
- Purchasing Coordinators
- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at **www.hhmi.org/jobs** for a listing of available positions.

IOWA STATE UNIVERSITY

Computational Molecular Biology

lowa State University, one of the nation's premier land-grant universities, is expanding its expertise in computational molecular biology by the addition of faculty in the departments of computer science, mathematics, physics, statistics, zoology and genetics, and in the Lawrence H. Baker Center for Bioinformatics and Biological Statistics.

Applications are sought for six tenure-track assistant professor positions (higher in some areas) from individuals conducting research in bioinformatics, genomics, functional and post-genomic analyses, metabolic pathways, protein structure/function prediction, or the physics of biological systems. An excellent record in research and teaching is required and experience beyond the Ph.D. is preferred.

Iowa State University strongly supports computational molecular biology through previous faculty appointments, establishment of a Ph.D. program in bioinformatics and computational biology, establishment of the Lawrence H. Baker Center for Bioinformatics and Biological Statistics, and the commitment to the positions advertised here. More than 40 ISU faculty are presently engaged in interdisciplinary bioinformatics research projects.

Positions are targeted to begin August, 2000. Details of each search and application procedures are on Web sites linked from http://www.bioinformatics.iastate.edu. For further information, contact Jim Cornette, Department of Mathematics, Iowa State University, 400 Carver Hall, Ames, Iowa 50011.

Iowa State University is an equal opportunity/affirmative action employer and encourages nominations of, and applications from, women and minority candidates



Microgravity Research, Program Manager NASA/Marshall Space Flight Center Huntsville, Alabama

The Science Directorate, NASA/MSFC seeks to fill the above Senior Executive Service (SES) position to provide scientific, engineering, and management leadership in the implementation of multidisciplinary scientific and commercial Microgravity Research. Research areas include biotechnology, combustion science, fluid physics and transport phenomena, fundamental physics and materials science. Research topics involve basic and applied ground-based and space-based investigations. The position requires skills in the management of basic and applied research, enabling technologies, and administration of assigned NASA programs and projects. Preference will be given to applicants who have a general understanding of physical and biological sciences and have experience in leading state-of-the-art research and technology development.

Information on microgravity research can be found at http://microgravity.msfc.nasa.gov, http://mgnews.msfc.nasa.gov, http://commercial.nasa.gov

Inquiries: Dr. M. Franklin Rose, Director, Science Directorate, NASA MSFC, Huntsville, AL 35812; 256-544-7721 or frank.rose@msfc.nasa.gov

Application: Apply under vacancy announcement MSFC ES-12-99. A full text job announcement and filing instructions are available at http://hrd.msfc.nasa.gov/JOBS/ses.html or by calling Sue Payne at 256-544-7530.

ASSOCIATE DEAN FOR RESEARCH

The School of Engineering at the University of Pittsburgh is searching for an Associate Dean for Research. The individual selected for this position will have academic credentials suitable for appointment to a tenured position in one of the School's seven departments. Candidates should have an outstanding research record, including a history of raising external funds. Preference will be given to those individuals who have a background in one of the five focus areas of the School: Advanced Computation, Bioengineering, Environment and Energy, Manufacturing, or Materials. The primary responsibilities of the Associate Dean will be to develop prominent research initiatives within the School, promote the establishment of a major research center, and lead technology transfer initiatives from the School to industry through the University's Office of Technology Transfer. The Associate Dean will have delegated responsibility for the use of the substantial resources that the School devotes to research and technology transfer. Applica-tions will be reviewed beginning March 15, 2000. The planned starting date for this position is July 1, 2000. Applications, including a cover letter, résumé, and the names, addresses (mail and e-mail) and telephone numbers of at least four references, should be sent to: Professor Pat Loughlin, Head of Search Committee, School of Engineering, 240 Benedum Hall, University of Pittsburgh, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

FALL, 2000 FACULTY POSITION Northern Michigan University Department of Biology

Northern Michigan University invites applications to fill a faculty position in biology beginning August 2000. Probable teaching assignments are indicated. The position requires a Ph.D. and is tenure-earning.

Aquatic Biology (Assistant Professor)

Aquatic biologist with strengths in fisheries management, ichthyology, and ecology. Preference given to individuals whose research would involve the Great Lakes region. Primary teaching responsibilities include introductory biology, ecology, ichthyology, and fisheries management. For information visit website: http://www.nmu.edu/www-edgar/biology/web/. Application review begins January 17, 2000 and continues until position is filled. Send curriculum vitae, statement of teaching and research philosophy, and names, addresses, telephone numbers, and e-mail addresses of three references to: Chair, Faculty Search Committee, Department of Biology, 1401 Presque Isle Avenue, Marquette, MI 49855-5341; Telephone: 906-227-2310; FAX: 906-227-1062; e-mail: biology@nmu.edu. Northem Michigan University is an Affirmative Action/Equal Opportunity Employer.

NEUROBIOLOGIST

The Department of Biology at the University of Maryland, College Park, website: (www.life.umd.edu/biology), has a TENURE-TRACK ASSIST-ANT or ASSOCIATE PROFESSOR position for a neurobiologist, with a preference for an individual working at the molecular level. Candidate must have a strong record of publication and funding. Teaching includes a graduate level course in area of the investigator's interest and an undergraduate course in neurophysiology or related areas. The position complements the strong and growing campus program in neuroscience and cognitive science (see website: www.life.umd.edu/nacs). Send letter of interest, curriculum vitae, statements of research and teaching interests, several representative publications, and three letters of reference to: Chair, MNB Search, Department of Biology, University of Maryland, College Park, MD 20742 USA. For best consideration, submit materials by January 6, 2000. Applications are especially encouraged from women and minorities, The University of Maryland is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR OF EDUCATION BAYLOR COLLEGE OF MEDICINE Department of Biochemistry and Molecular Biology

The Department of Biochemistry and Molecular Biology at Baylor College of Medicine is recruiting for an outstanding MASTER TEACHER to lead and coordinate its medical student curriculum, teach biochemistry, and direct its graduate education program. Experienced, successful, energetic leader with Ph.D. invited to apply for a faculty position before January 1, 2000. Please submit application describing qualifications and interest with up-to-date curriculum vitae and three letters of reference to: Director Search Committee, Department of Biochemistry and Molecular Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030-3498. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

FACULTY POSITION EXPERIMENTAL BIOPHYSICS Department of Physics University of Waterloo

The Department of Physics, University of Water-loo, invites applicants for a tenure-track position at the Assistant Professor level in the area of experimental biophysics, to begin in September 2000. Candidates in all areas of biophysics and biological physics will be considered. In exceptional cases appointment at a more senior level will be considered. Further information about the Department can be found on our website: http://www.science.uwaterloo.ca/physics. This appointment is subject to the availability of funds.

Applicants must have a Ph.D. degree, a record of research accomplishments normally achieved through postdoctoral experience, and promise for excellence in teaching. Salary range commensurate with qualifications and experience. Candidates should submit by regular mail a curriculum vitae, an outline of research accomplishments, a brief research plan, and a statement of their teaching goals. Arrangements should be made for three letters of reference to be sent. Materials should be received by January 17, 2000 and addressed to: Dr. J. Lepock, Biophysics Search Committee, Department of Physics, University of Waterloo, Waterloo, Ontario, CANADA, N2L 3G1, Telephone: 519-888-4567, Extension 6831; e-mail: PHYSICS@UWATERLOO.CA.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Water-loo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disability.

BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biological Sciences at the University of North Texas (website: www.biol.unt.edu) invites applications for a tenure-track ASSISTANT or ASSOCIATE PROFESSOR. Preference will be given to applicants with a successful record of obtaining extramural funding. Applicants should use contemporary molecular approaches to study the regulation of cellular metabolism in a eukaryotic system. Located in the Dallas-Fort Worth metroplex, University of North Texas has over 26,000 students, and offers undergraduate and graduate (M.S./Ph.D.) degree programs in biochemistry. Excellent research facilities and competitive salary and start-up funds are available. Submit curriculum vitae, three letters of reference, and statement of research goals to: Kent D. Chapman, Division of Biochemistry and Molecular Biology, Department of Biological Sciences, University of North Texas, Denton, TX 76203-5220. Applications received before December 20, 1999, will be given full consideration. Affirmative Action/Americans with Disabilities Act/Equal Opportunity Employer.

POSITIONS OPEN

The American Museum of Natural History is seeking a CURATORIAL ASSOCIATE to oversee the development, computerization, and management of a world-class collection of frozen tissues and to facilitate the use of these tissues by American Museum of Natural History and outside researchers, under museum policies and under the direction of the director of the facility. Duties will include management of support personnel, handling accessions, loans and requisite permits, addressing conservation and curation issues, overseeing the maintenance and day-to-day running of the collections storage facilities, as well as acting as a liaison with the organismal departments. The successful applicant is expected to have a Ph.D. in biology, strong management and interpersonal skills, some level of database expertise, and be well organized and self-motivated. Ability to write grant proposals is a plus as is expertise in collection conservation. Salary commensurate with experience. Please have three letters of reference sent and submit cover letter describing qualifications and curriculum vitae to: Dr. Rob DeSalle, Division of Invertebrate Zoology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. Evaluations will begin 10 December 1999, and will continue until position is filled. Equal Opportunity/Affirmative Action Employer. Women and minority candidates are strongly urged to apply.

FACULTY POSITION MICROBIOLOGY AND IMMUNOLOGY BACTERIAL PATHOGENESIS

A full-time, tenure-track position is available at the ASSISTANŤ or ASSOCIÂTE PROFESSOR level. Primary appointment will be in the Department of Microbiology and Immunology in the School of Medicine and Dentistry. The successful candidate will join the faculty in the Center for Oral Biology and the Aab Institute of Biomedical Sciences, which is housed in the recently constructed Arthur Kornberg Research Building. Preference will be given to individuals conducting research into molecular mechanisms of pathogenesis by bacteria. Candidates at the level of Assistant Professor should have significant postdoctoral experience, a consistent record of quality peerreviewed publications, and substantial promise for becoming a productive, independent investigator. Individuals seeking appointment at the level of Associate Professor should also have a demonstrated record of extramural funding. Applicants should send a letter expressing their interest in the position, along with a curriculum vitae and names of at least three references to: Dr. Lawrence Tabak, Director, Center for Oral Biology (Box 611), University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. The University of Rochester is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

CHAIRPERSON. Department of Botany and Plant Pathology at Michigan State University. The College of Natural Science and the College of Agriculture and Natural Resources at Michigan State University invite applications and nominations for the position of chairperson of the Department of Botany and Plant Pathology. For full ad, see "Chair Search at website: http://www.botany.msu.edu. Candidates must possess an established record of distinguished scholarship, administrative experience, proven leadership and interpersonal skills, excellent communications abilities, and a broad vision of innovative programs in plant biology research, education, and extension. Applicants should submit a complete curriculum vitae, and names, addresses, and telephone numbers of five references. Every effort will be made to maintain confidentiality until the final slate of candidates is selected. Review of applications will begin February 15, 2000. Please send application materials to: Search Committee, Department of Botany and Plant Pathology, Michigan State University, East Lansing, MI 48824-1312. Anticipated starting date will be January 2001. Women and underrepresented minorities are strongly encouraged to apply. MSU is an Affirmative Action/Equal Opportunity Employer.

Tenure Track Faculty Positions in Engineering of Growth and Remodeling

The Department of Biomedical Engineering at Washington University in St. Louis invites applications for junior or senior level tenure-track faculty positions in the field of Engineering of Growth and Remodeling. We are seeking candidates with a PhD or equivalent degree in bioengineering, biophysics or a closely-related discipline and who have exceptionally strong expertise and interest in developing and applying engineering principles to the study of cellular and tissue growth and remodeling processes. Areas of interest include cell & tissue engineering, mechanics of angiogenesis, vascular remodeling, cardiac growth and remodeling,

These positions represent a major expansion of the department supported, in part, by recent Development and Special Awards from the Whitaker Foundation that will enable the construction of a new building for the department. The department is closely affiliated with the Institute of Biological and Medical Engineering, a joint enterprise of the Schools of Engineering and Medicine that includes a large and diverse life sciences community.

Successful applicants at the junior level will be expected to establish an independent research program with extramural funding. Distinguished, senior level applicants with an outstanding record of educational and research accomplishments will be considered for one of the newly endowed chairs in the department. The successful applicant will be expected to establish research collaborations with other engineers and biologists at Washington University. He/she would also be expected to develop and teach biomedical engineering courses at the undergraduate and graduate levels. (Please visit our website: http://biomed.wustl.edu)

Applicants should send a curriculum vitae, a statement of their ongoing research program and future goals, and names of at least three references (plus addresses, fax, and email). Applicants may respond by email to beei@biomed.wustl.edu, or by mail to:

Growth and Remodeling Engineering Search Committee, c/o Beverly Spudich, Campus Box 1097, Department of Biomedical Engineering, Washington University, One Brookings Drive, St. Louis, MO 63130

Preference will be given to applications received before January 15, 2000. Washington University is an equal opportunity employer.



FACULTY POSITION

Physician-Scientist opening for an outstanding candidate involved in basic and clinical aspects of immunology, allergy and asthma. Capacity for strong basic research as well as translational work resulting in independent funding. Expertise that includes, but is not limited to, cellular and molecular immunology, airway biology, genetics of complex disease, genomics and proteonomics is desired. Faculty rank and salary dependent on qualifications.

Send CV to:
National Jewish Medical
and Research Center
1400 Jackson St., K621
Denver, CO 80206
FAX: (303) 398-1806
e-mail: Rosenwasserl@njc.org



SCIENTIFIC REVIEW ADMINISTRATORS

Opening Date: 11-15-99 Closing Date: 12-13-99

The Division of Extramural Activities of the National Cancer Institute (NCI), National Institutes of Health, is seeking several individuals to join a multidisciplinary group of Scientific Review Administrators to manage the initial peer review of research grant applications submitted to the NCI. The activities are based in Rockville, Maryland, a suburb of Washington, DC, but some travel (site visits) will be involved.

Application information is listed in the specific vacancy announcement indicated below. Candidates should have independent research experience and expertise in current methods of cancer research in one or more of the areas listed. Candidates should also be familiar with the NIH grant application, review and support process. Candidates must be United States citizens. The salary range for these positions is \$48,796 to \$89,142 (1999 rate with locality).

NUMBER OF VACANCIES - 6

POSITION TITLES: SIX POSITIONS WILL BE SELECTED FROM THE FOLLOWING SEVEN JOB TITLES/SERIES: Psychologist, Biologist, Microbiologist, Health Scientist Administrator, Medical Officer, Chemist and Epidemiologist.

SEEKING APPLICANTS POSSESSING EXPERIENCE AND EXPERTISE IN THE FOLLOWING AREAS.

- 1. Biomedical technology development, imaging and/or bioinformatics as applied to cancer research.
- 2. Molecular or cellular biology of cancer pathogenesis, developmental therapeutics, and/or molecular pharmacology of therapeutics with applications to cancer.
- 3. Translational and/or clinical oncology research in cancer biology, detection, diagnosis and/or treatment.
- 4. Cancer epidemiology and/or cancer communications related to cancer prevention, cancer control, or tobacco use and its effects.

To obtain information about the application process or documents required for consideration for any of these positions, candidates may contact the National Cancer Institute, Office of Human Resources and Consulting Branch, at 301-402-2789 and reference vacancy announcement number, NCI -99-3002. To obtain a fax of this information, call 1-800-728-5627 or 301-594-2953 and enter the fax ID number 1935. The announcement is also listed on the NIH CareerHere website at the following URL address: http://careerhere.nih.gov.

Selection for these positions will be based on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability. The NCI/NIH is an equal opportunity employer.

AAVEO

DEPARTMENT HEAD DEPARTMENT OF CHEMISTRY The University of Illinois at Chicago

The Department of Chemistry at the University of Illinois at Chicago is seeking a Department Head. University of Illinois at Chicago, located in the heart of Chicago, is a Research I University with approximately 16,000 undergraduates, 6,000 graduate and 2,500 professional students. It is the largest university in the greater Chicago area. The Department of Chemistry has major research programs in analytical, biochemical, inorganic, organic and physical chemisry. There are 27 faculty and 150 graduate and postdoctoral students. The Head is the chief administrative officer of the department with responsibilities for the instructional programs, administrative, budgetary, and promotion decisions, and for providing leadership in the development of research, teaching, and public service. The successful candidate will have an outstanding research program, a strong commitment to teaching, demonstrated leadership and administrative skills, and will be eligible for appointment as a full professor. Although the search will continue until the position is filled, applications should be received by January 10, 2000, to receive fullest consideration. Applications and nominations should be sent

Professor Cynthia J. Jameson Search Committee for Head of Chemistry College of Liberal Arts and Sciences, M/C 228 The University of Illinois at Chicago 601 South Morgan Street Chicago, IL 60607-7104

University of Illinois at Chicago is an Affirmative Action/ Equal Opportunity Employer. Applications from women and minorities are particularly encouraged.

Rose-Hulman Institute of Technology invites applications for a tenure-track **BIOLOGIST**. Candidates must have a Ph.D. with expertise in anatomy and physiology. Strong commitments to undergraduate teaching, interest in curriculum development, and the ability to develop a research program involving undergraduates are required. Research interest in manimalian cell culture is a positive. Exhibited interest in developing web-based teaching tools is also a positive. Starting date is fall 2000. Applicants should submit a letter of application, a résumé, and three letters of reference to:

Lee Waite, Chair, Applied Biology and Biomedical Engineering Rose-Hulman Institute of Technology 5500 Wabash Avenue Terre Haute, IN 47803

Rose-Hulman is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR OF BIOLOGY—tenure-track beginning August 2000. Qualifications: Ph.D. preferred, ABD acceptable. Responsibilities: teach courses in introductory biology, vertebrate anatomy, and evolution; lead student projects. For position description and application process, contact: Dr. Jann Freed, Interim Vice President of Academic Affairs, Central College, Pella, IA 50219; e-mail: (inquiries only) facsearch@central.edu. Review of applications begins December 17, 1999, and will continuntil the position is filled. Affirmative Action/Equal Opportunity Employer.

Biology: Microbiology, ASSISTANT PROFES-SOR, tenure-track; Ecology/Environmental Science, ASSISTANT PROFESSOR, tenure-track; Science Education, INSTRUCTOR, non-tenure, one-year with possible renewal. All positions require Ph.D. Screening begins January 7, 2000, and continues until filled. For full description, requirements, and application procedures, contact: Jack Butler, e-mail: butler@cmsul.cmsu.edu; WCM 306, Central Missouri State University, Warrensburg, MO 64093 or see website: www.cmsu.edu/biology/jobs. Affirmative Action/Equal Employment Opportunity/Americans with Disabilities Act.

POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Microbiology and Cell Science at the University of Florida is seeking an exceptional scientist for a tenure-track position at the level of Assistant Professor, available July 1, 2000. This new faculty member will be joining a department with strengths in the areas of microbial physiology, molecular biology, and biotechnology. All applicants should have a Ph.D. degree in Microbiology or in a related field and at least two years of postdoctoral research experience with a significant record of productivity. Successful candidates are expected to develop a strong, externally-funded research program in the area of molecular genetics of prokaryotes or lower eukaryotes, biochemistry, or microbial physiology. Preference will be given to candidates with potential to develop an exceptional research program rather than to a specific area of research interest. The teaching responsibilities would include an introductory course in bacterial genetics and additional course(s) of specific interest at the graduate level. The Department of Microbiology and Cell Science is located in a new building with excellent research facilities (DNA sequencer, NMR, MALDI-TOF Mass Spectrometer, Electron Microscopes, etc.). Candidates should send their curriculum vitae along with the names of at least three references with e-mail contact information and a statement of research and teaching interests to: Dr. K. T. Shanmugam, Department of Microbiology and Cell Science, Box 110700, University of Florida, Gainesville, FL 32611. Application deadline is January 15, 2000. University of Florida is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR MOLECULAR PHARMACOLOGY

Candidates are invited to apply for the position of Assistant Professor. This position offers the opportunity for tenure. We are seeking individuals with a record of excellence in research who will apply skills in biochemistry, molecular biology, and cell biology to solve problems relevant to molecular pharmacology. Essential requirements are: an innovative research program that complements programs within the Department and the Medical School; and a commitment to the training of Fellows and graduate students. Research areas of interest to the Department include: mechanisms of drug, hormone, oncogene, growth factor, and neurotransmitter actions; structure, function, and regulation of receptors, regulatory enzymes, and transporters; signal transduction, second messengers, and protein phosphorylation; post-translational modification and intracellular targeting.

Substantial packages will be provided to start up and sustain the laboratories of successful candidates. Submit a curriculum vitae, a statement of research interests, future plans and names of three references to: Dr. Charles S. Rubin or Dr. Susan B. Horwitz, c/o Ms. Anna Cioffi; Administrator, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.

Full-Time Facility Position—One position remains at the ASSISTANT PROFESSOR or ASSOCI-ATE PROFESSOR level at the Department of Physiology of the College of Medical Sciences, Health Professions Division, Nova Southeastern University. The candidate's responsibilities will include participation in team-taught human physiology courses to health profession students, scholarship and service. Individuals with teaching experience in renal, respiratory, or endocrine physiology will be given special consideration. The College of Medical Sciences is located in the new Health Professions Division facility on the Fort Lauderdale campus. Salary is dependent on qualifications, and fringe benefits are generous. This position is available immediately. Please send a letter of interest, curriculum vitae, copies of graduate transcripts, and the names, addresses, and telephone numbers of three references to: (HLF) Nova Southeastern University, Office of Human Resources, 3301 College Avenue, Fort Lauderdale, FL 33314. Nova Southeastern University is an Affirmative Action, Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION FOREST BIOMETRY

The Department of Forest Ecology and Management at the University of Wisconsin-Madison invites applications for a 12-month, tenure-track position at the Assistant Professor level. Candidates must be dedicated to excellence in research and committed to teaching and mentoring both undergraduates and graduates. The specific research area is open, but must relate to forest biometry or quantitative ecology. Required qualifications: (1) Ph.D. in forest biometry/ quantitative ecology as it relates to natural resource inventory, growth and yielding modeling, or environmental assessment/monitoring, and (2) strong oral and written communication skills and an ability to work effectively with a wide range of clientele and professionals. Preference will be given to candidates with at least one degree in forestry and demonstrated success in securing grants and publishing. Further information can be found at: website: http://forest. wisc.edu/Current.html. The position is available July 1, 2000. An earlier start date can be negotiated. Applications should be received by December 20, 1999, to guarantee consideration. Review of files will begin on January 3, 2000, and will continue until a suitable candidate is found. To apply, submit a letter of application stating how you meet the required and desired qualifications; curriculum vitae; official copies of all academic transcripts; and the names, telephone numbers, and postal and e-mail addresses of at least three references to: Dr. Erik V. Nordheim, Chair, Search Committee, Department of Forest Ecology and Management, University of Wisconsin-Madison, 1630 Linden Drive, Madison, WI 53706-1598. Telephone: 608-262-0326. FAX: 608-262-9922. E-mail: nordheim@facstaff.wisc.edu.

Note: Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confidentiality. The University of Wisconsin-Madison is an Equal Opportunity and Affirmative Action Employer. Qualified women and minorities are strongly encouraged to apply.

FACULTY POSITION

Northern Illinois University anticipates a tenuretrack position for fall, 2000. ASSISTANT PRO-FESSOR in CONSÉRVATION BIOLOGY. A Ph.D. in biology and postdoctoral research experience are required. The successful candidate is expected to develop a vigorous, externally funded research program, direct graduate (M.S. and Ph.D.) students, and teach a course in conservation biology and introductory courses for majors and non-majors. The candidate's expertise should complement the existing program in biological sciences, employing modern methods to address fundamental questions in conservation biology. Preference will be given to candidates whose research and teaching experience emphasizes field-oriented plant conservation biology. Send a letter of interest, curriculum vitae, brief statements of research and teaching goals, and three letters of reference to: Dr. Michael Parrish, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861. Website: http:// www.bios.niu.edu. Telephone: 815-753-1753; FAX: 815-753-0461; e-mail: biosjobs@niu.edu. Complete application must be received by January 15, 2000. Affirmative Action/Equal Employment Opportunity.

The Biology Department of Rutgers University—Camden seeks a broadly trained biologist with research interests in biological signaling systems for a tenure-track ASSISTANT PROFESSOR position beginning fall 2000. Ph.D. required and postdoctoral experience preferred. The successful candidate is expected to teach undergraduate and/or graduate courses in the area of his/her expertise, to participate in introductory biology courses, and to maintain an introductory biology courses, and three letters of recommendation to: Dr. P. J. McIlroy, Biology Department, Rutgers University, Camden, NJ 08102. Rutgers is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.

MILLENNIUM has a new vision for the future of medicine. That drug development be perfectly precise. That all patient therapies be totally individualized. That all disease be targeted at its core. We will succeed in realizing this vision for eight hundred reasons—our people. Expertise, insight, synergy and, above all, passion unite us in creating a better way to cure disease and allow us to have fun while doing it. The face of the future never looked brighter.

SENIOR SCIENTIST, CHEMOPREDICTION

Take an active role as you lead a pharmacogenomics project to develop tests that will correlate gene expression or DNA mutation in tumors with sensitivity or resistance. These markers will be used to aid in the development of new drugs, bring new drugs to market, identify additional markets for approved drugs, and direct individualized use of such drugs to choose the most effective combination of drugs for each cancer patient. Requires a PhD and postdoctoral experience, a strong publication record while in academics, and 3-5 years of industrial experience. Strong skills in genomics technologies, molecular biology, and problem solving are essential. A background in drug development and/or oncology is a plus. You will have substantial opportunity for innovation and challenging time lines.

Join us in building the biopharmaceutical company of the future at our Cambridge facilities. Mail your resume/cv to: Millennium Pharmaceuticals, Inc., Attn: Jack Knox, Contract Recruiter, 75 Sidney Street, Cambridge, MA 02139. Email: knox@mpi.com. Fax: 617-225-0884. See our website at www.mlnm.com. We are an equal opportunity employer committed to discovering the individual in everyone.

Transcending the limits of medicine^{3™}



Scientist/Senior Scientist Molecular Biology (Position #99-38)

The Molecular Biology group is seeking an experienced and ambitious individual to join a dynamic, growing team that is solving challenging problems in heterologous gene expression and metabolic pathway engineering. The candidate must have a Ph.D. in molecular biology or other relevant discipline, together with three or more years of postdoctoral experience. Industrial experience would be a definite plus. A strong record of scientific achievement in the development and use of industrially relevant gene expression and protein production systems is desirable, as are proven capabilities in the molecular analysis of gene expression and strain engineering. Experienced protein biochemists with considerable molecular biology experience are also encouraged to apply. The candidate will be expected to conduct experiments, prepare proposals and maintain contact with our clients. In addition, the candidate could have a role in guiding the efforts of the less senior staff. Consequently, an ability to work independently and as part of a team are critical, as are strong interpersonal and communication skills.

MDS Panlabs is an equal opportunity employer. We offer competitive salary and benefit packages. Submit resume to:

MDS Panlabs ATTN: Human Resources (Position #99-38) 11804 North Creek Parkway South Bothell, WA 98011-8805 Fax: (425) 487-3787

Email: employment@panlabs.com



the University of Health Sciences

CHAIR OF PHARMACOLOGY and PHYSIOLOGY- ASSISTANT/ ASSOCIATE PROFESSOR

The University of Health Sciences invites applications for two faculty positions.

CHAIR OF PHARMACOLOGY

The Chair position begins July 2000 and will direct the operations of the pharmacology department in the Basic Sciences Division, be responsible for delivering pharmacology curriculums, and develop and facilitate scholarly/research activities. Must have a Ph.D. in Pharmacology, or other terminal degree, i.e., Pharm.D., with clinical and education experience, prior experience in academics, administration, and/or research, and be at or eligible for Associate Professor or higher rank. Preference will be given to candidates who have lectured in a medical school or related environment.

ASSISTANT/ASSOCIATE PROFESSOR OF PHYSIOLOGY:

The Department of Physiology is seeking a physiologist/exercise physiologist to participate in a dynamic medical education environment. The successful candidate will provide leadership as part of an initiative to develop a strong presence of exercise physiology in the medical school curriculum and scholarly productivity of the University. The position involves modest participation in the teaching program. Requirements for the position include a Ph.D., or equivalent, in physiology, exercise physiology or related field, postdoctoral experience and a proven record in research. Special consideration will be given to those with experience in medical applications of exercise, respiratory physiology and proven instructional talents. Must be able to work effectively and efficiently in a team environment and possess excellent communication skills. For additional information, contact the Search Committee Chair, Gary O. Ballam, Ph. D., gballam@fac1.uhs.edu.

Applications will be reviewed until successful candidates are identified. Candidates should send a letter of interest, curriculum vitae, a statement of teaching philosophy, a statement of research interests, and the names, addresses, and telephone numbers of three references to:

Dawn M. Harrington Director of Human Resources the University of Health Sciences 1750 Independence Ave. Kansas City, MO 64106-1453

EOE

E-mail: dmharri@alum.uhs.edu Phone: 816.283.2371 Fax: 816.283.2285 www.uhs.edu

CHAIR, DEPARTMENT OF BIOLOGY

The University of Southern Indiana invites applications for the position of Chair of the Department of Biology beginning August 2000. The department, one of five housed in the Pott School of Science and Engineering Technology, has 11 full-time faculty and approximately 300 undergraduate majors. Additional information about the department may be found on its website: http://deepcnet_usi.edu/biology. Reporting to the Dean of the School, the Chair is responsible for total departmental operations, including curriculum, personnel, and budgetary matters. The Chair also teaches undergraduate courses in the department. Ph.D. in biology or related field required. Area of specialization open, but ideally will complement those currently represented in the department. Candidates must provide evidence of success in teaching and research. Rank and salary dependent on credentials and experience. The University is committed to excellence in teaching, scholarship and professional activity, and service to the University and community. Review of applications will begin January 17, 2000. and continue until position filled. Submit letter of application, curriculum vitae, and the names/addresses/telephone numbers/e-mail addresses of three professional references to: Professor Jay Fredrich, Chair, Biology Chair Search Committee, Pott School of Science and Engineering Technology, University of Southern Indiana, 8600 University Boulevard, Evansville, IN 47712.

University of Southern Indiana is an Affirmative Action/ Equal Employment Opportunity Employer. Women and minorities encouraged to apply.

GENETICS AND INTRODUCTORY BIOLOGY POSITION

Anticipated tenure-track ASSISTANT PROFES-**SOR** position for biology Ph.D. with experience in computer-aided instruction, externally-funded in-structional programs, research in genetics, and dem-onstrated creative approaches to biology general education. Responsibilities: develop and coordinate laboratory course to complement general genetics course; teach human heredity and multimedia introductory biology; seek extramural funding for innovative genetics education research; engage in other scholarly activities, primarily in instruction. By 31 December 1999 please submit a curriculum vitae, transcripts, statement of teaching philosophy and plans for scholarly activities, and three letters of reference to: Chair, Genetics and Introductory Biology Search Committee, Zoology Department, Oklahoma State University, Stillwater, OK 74078-3502. For additional information, Telephone: 405-744-5555; FAX: 405-744-7824; website: http:// zoology.okstate.edu/. Women and minorities are strongly encouraged to apply; Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.

EXECUTIVE EDITOR

The Journal of the National Cancer Institute/Oxford University Press, has a position available for an Executive Editor. Overseeing the work of four Senior Editors, you will maintain the quality of articles published by the Journal of the National Cancer Institute, a leading cancer journal; review, revise and rewrite scientific content of manuscripts; communicate with authors and editors, and participate in planning Journal content/policy. Must have an advanced degree in a biochemical field and supervisory experience. We offer competitive salaries and great benefits, plus a professional work environment. For immediate consideration, please send/FAX résumé with salary expectations to: Human Resources Department

Oxford University Press 2001 Evans Road Cary, NC 27513-2010 FAX: 919-677-2673 E-mail: humanres@oup-usa.org Website: www.oup-usa.org

Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

FACULTY MEMBER RECRUITMENT CHIEF OPERATING OFFICER HIV VACCINE TRIALS NETWORK (HVTN)

Fred Hutchinson Cancer Research Center in Seattle, Washington, is currently recruiting for an immediate opening as Chief Operating Officer (COO) of a NIAID-supported HIV Vaccine Trials Network (HVTN). This ASSISTANT/ASSOCIATE FAC-ULTY POSITION will be a central figure in clinical trial design, central operations, and coordination of clinical trials of HIV vaccines. In addition, this position will be directly responsible for the supervision of six to twelve professional staff persons. The COO will work closely with all the investigators, laboratories, NIAID staff, and companies involved in HIV vaccine development. The successful candidate will have either a M.D. (B.E./B.C.) or a Ph.D. with experience as a clinical investigator in HIV medicine or viral vaccines who wants to make an impact on disease prevention. The HVTN will have extensive collaborations with a large group of internationally renowned laboratories and the ability to work with a discretionary fund that allows the network to move into new areas. For someone committed to developing an HIV vaccine, this is a real "impact position." The position The position allows ample time for individual scholarship. A letter of interest and curriculum vitae may be sent to: Lawrence Corey, M.D., HVTN Scientific Steering Committee, Chair, FHCRC, P.O. Box 19024, D3-100, Seattle, WA 98109-1024 or by e-mail: lcorey@fhcrc.org. Position open until filled. Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer.

The Department of Biology at The University of New Mexico is seeking applicants for a full-time, tenure-track position at the ASSISTANT PROFES-SOR level, to begin fall, 2000. Minimum requirements include a Ph.D. in some subdiscipline of biology at the time of appointment. Preferred characteristics are: postdoctoral training; interest in working with colleagues whose interests include a broad array of disciplines and organisms; the ability to develop an independent research program in some aspect of comparative physiology of vertebrates or invertebrates; and a demonstrated commitment to quality teaching at the undergraduate through graduate levels. Teaching responsibilities will include an upper-division, organ-systems-level animal physiology course that takes a comparative approach, and participation in an introductory biology course alternating with a course of the applicant's choosing.

Information concerning job requirements, applications, and the Biology Department can be obtained at website: http://biology.unm.edu/Welcome.html or by request to: Physiology Search Committee, Department of Biology, University of New Mexico, Albuquerque, NM 87131. FAX: 505-277-0304. Completed applications must be received at the above address by January 12, 2000.

We welcome applications from candidates who are members of underrepresented groups. University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator.

ASSOCIATE DEAN FOR RESEARCH, College of Health Professions, Medical University of South Carolina. Seeking health, basic, or social science researcher with funding record to work with over 100 faculty in multiple disciplines, such as laboratory sciences, rehabilitation, and health administration, to foster growth in a developing research program, mentor faculty, work with funding agencies, and lead research efforts in this progressive academic health center in beautiful Charleston, South Carolina. Requires earned doctorate, funding record in health, basic, or social sciences, and demonstrated ability to work with multiple disciplines. Contact: Dr. Valerie T. West, Chair, Search Committee, MUSC, P.O. Box 250701, Charleston, SC 29425; FAX: 843-792-4024; website: http://www2.musc.edu/chp/ new.htm.

POSITIONS OPEN

FISHERIES MANAGEMENT Southern Illinois University Carbondale

The Department of Zoology invites applications for a 12-month, tenure-track ASSISTANT PROFES-SOR position in Fisheries Management with 75 percent research in the Fisheries and Illinois Aquaculture Center and 25 percent teaching. Possible research specialties may include (but are not limited to) stocking evaluations, forage manipulation, recruitment processes, and population dynamics. Applicants should have demonstrated skills in experimental design and statistical analyses. The department seeks a researcher to complement strengths in aquaculture, aquatic ecology, ichthyology, fish genetics, and wildlife ecology. Modern research facilities and start-up funds are available. The successful candidate will be expected to develop an externally funded research program, supervise M.S. and Ph.D. students, and teach undergraduate and graduate courses in fisheries management. Candidates must have a Ph.D. in an appropriate field with a record of peer-reviewed publication and scholarly accomplishments commensurate with experience, and demonstrated grant success or strong evidence of funding potential. Preference will be given to applicants with postdoctoral experience with small and large man-made impoundments. Position begins 16 August 2000. Applicants should send a curriculum vitae, statement of teaching and research interests and plans, copies of transcripts, and have three (3) letters of reference sent to: Dr. Christopher C. Kohler, Fisheries and Illinois Aquaculture Center, Southern Illinois University Carbondale, Carbondale, IL 62901-6511. Review of applications will begin on 15 January 2000 and continue until the position is filled. Information about the department, university, and center can be found at website: http://www.science.siu.edu/zoology and website: http://131.230.57.1/fishweb/coopfish. htm. E-mail inquiries should be directed to the search committee chair e-mail: ckohler@siu.edu. Southern Illinois University Carbondale is an Affirmative Action/Equal Opportunity Employer. Qualified women and minorities are encouraged to apply.

TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR OF BIOLOGY

The candidate must have a Ph.D. and be a broadlytrained molecular biologist who is able to contribute to a diverse array of courses which may include molecular biology, gene engineering, genetics, and an advanced specialty course. Candidate must have a strong commitment to teaching at the undergraduate and Master's of Science levels and participate in introductory courses. Candidates must have a record of published research and show potential for developing and sustaining an independent, externally funded research program involving students. Submit letter of application, curriculum vitae, official transcripts from both undergraduate and graduate education, a detailed statement of research and teaching interests, and three letters of recommendation to: **Dr. Jeffrey** Thompson, Chair, Department of Biology, Attention: Molecular Biology Search, California State University, 5500 University Parkway, San Bernardino, CA 92407; Telephone: 909-880-5305; FAX: 909-880-7038; E-mail: jthompso@csusb. edu. Deadline is December 15, 1999, or until filled. For more information about the position, university, and department please see our website: http:// biology.csusb.edu. Cal State is an Equal Opportunity Employer committed to a diversified workforce

CLIMATOLOGIST/GIS

ASSISTANT PROFESSOR, tenure-track, fall, 2000 for growing interdisciplinary program, pending final budgetary approval. Develop courses in global climate change and meteorology, ability to teach GIS in new laboratory desired. Visit website: www. drake.edu. Send letter, curriculum vitae, teaching and research goals, and references to: Dr. William J. Ehmann, Drake University, 2507 University Avenue, Des Moines, IA 50311. Review begins January 10, 2000. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

Applied Ocean Physics & Engineering Blology, Marine Chemistry & Geochemistry Marine Geology & Geophysics Physical Oceanography

Applications are invited from new or recent doctorates in the fields of biology, molecular biology, microbiology, chemistry, engineering, geology, geophysics, mathematics, meteorology and physics, as well as oceanography. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

Fellowships are awarded for 18 month appointments with a stipend of \$42,000 per year, a modest research budget and eligibility for group health insurance. Recipients are encouraged to pursue their own research interest in association with resident staff. Completed applications must be received by January 15, 2000 for the 2000-2001 awards. Awards will be announced in March.

Further information and application forms may be obtained through the Education section of the WHOI World Wide Web homepage at http://www.whoi.edu/education

mip://www.witol.edu/education or by writing directly to: Dean of Graduate Studies Education Office, MS #31 Woods Hole Oceanographic Institution Woods Hole, MA 02543-1541 Telephone: (508) 289-2950 Fax: (508) 457-2188 Email: postdoc@whoi.edu Internet: http://www.whoi.edu/

WOODS HOLE OCEANOGRAPHIC INSTITUTION



Equal Opportunity/Affirmative Action Employe



MAYO CLINIC

Division of Gastroenterology and Hepatology

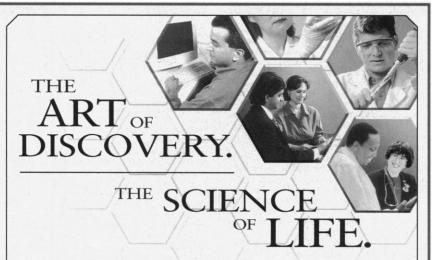
Postdoctoral Research Position

A postdoctoral position is available in an established and active laboratory to study molecular properties of ion channels in smooth muscle and in Interstitial Cells of Cajal, the putative pacemaker of the gastrointestinal tract. Ongoing studies include ion channel cloning, second messenger regulation and characterization of electrical properties of ion channels using intracellular recording on intact tissues and the patch clamp technique on isolated cells.

Candidates must have an M.D. or Ph.D. degree. Please send curriculum vitae and the names of three references to:

Gianrico Farrugia, M.D.
Division of Gastroenterology and
Hepatology
Mayo Clinic
200 First Street SW
Rochester, MN 55905
www.mayo.edu/research/gi_phys_lab/

Mayo Foundation is an affirmative action and equal opportunity employer and educator.



What if you could be on the threshold of some of the greatest scientific advances of our time, developing new treatments for cancer, AIDS and other serious diseases? At Agouron Pharmaceuticals, you can. Agouron is a fully integrated pharmaceutical company in San Diego, CA, providing opportunities from Research to Commercial Affairs. We encourage and promote creativity, innovation and leadership in each individual. If you enjoy both autonomy and collaboration in a dynamic environment, consider joining our team.

Agouron has several opportunities in a variety of disciplines throughout our departments. For detailed information regarding additional opportunities, access our Website at: www.agouron.com

RESEARCH SCIENTISTS/SENIOR SCIENTISTS/GROUP LEADERS

We have immediate opportunities available for experienced Virologists to join our team. Successful candidates will be expected to perform experimentation and/or direct internal and external collaboration involved with efforts that support clinical development of anti-viral drugs. Requires a PhD in Virology or Molecular Biology; current and comprehensive knowledge of virology within molecular biology and/or biochemistry; willingness to take initiative and contribute to a team environment; strong verbal/written communication, problem-solving, and organization skills. Additional strengths may involve the ability to implement strategies to discover, identify and evaluate pre-clinical anti-viral compounds. Experience in anti-viral drug development, especially HIV, with an understanding of drug resistance principles and regulatory submissions preparation is desired. Code 128/AP

ASSISTANT SCIENTIST, CRYSTALLOGRAPHY

We seek an Assistant Scientist within our Crystallography group to implement experimental strategies and protocols for purification, characterization and crystallization of proteins. Successful candidate will apply basic factorial crystallization protocols to specific protein targets; interpret and analyze results; carry out crystal soaking experiments with heavy atom compounds using safe laboratory practices; gain familiarity with micro, streak and macro seeding techniques; provide written reports and oral presentations which summarize findings for project and group scientists. Requires BS in Biochemistry or related discipline; general knowledge of biochemistry and/or molecular biology with experience working with proteins; willingness to take initiative and contribute to a team environment; strong verbal/written communication, problem-solving, and organization skills. Code 110/DM

ASSOCIATE SCIENTIST, RESEARCH PHARMACOLOGY

We have an immediate opening for an Associate Scientist within our Research Pharmacology team to study the pharmacokinetic and in vivo efficacy of pre-clinical compounds. The qualified candidate will possess a BS/MS in Pharmacology, Biochemistry or a related field; 3+ years' experience with HPLC or LC/MS method development and drug analysis; familiarity with computer data systems. The successful candidate must be detail oriented, able to perform multi-tasks and function as a team player. Experience with in vivo protocols and tumor models would be beneficial. Code 125/KLAS

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Agouron offers competitive salaries and excellent benefits such as paid medical and dental as well as 401(k). If you have a desire to deliver promising therapeutics to the people who need them most, submit your resume referencing code to: Agouron Pharmaceuticals, Inc., Code (see above), 10777 Science Center Drive, San Diego, CA 92121; email: jobs@agouron.com. EOE

www.agouron.com

The Physiology and Pharmacology research group of the Division of Basic Biomedical Sciences at the University of South Dakota School of Medicine has a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level available. All areas of research will be considered with preference given to areas of research that will complement and/or extend the existing research programs of the Division's Physiology and Pharmacology group website: www.usd.edu/physphar. Candidates will be expected to participate in the teaching program of the Physiology and Pharmacology group.

The Division is investing heavily in the research infrastructure of the Basic Biomedical Sciences. This position will be provided a competitive salary, a generous start-up package and research facilities. The successful candidate will be expected to establish a strong, extramurally funded research program, and collaborations with other faculty members with mu-

tual interests will be encouraged.

Applicants must have a Ph.D., M.D., or equivalent experience and a minimum of two years of relevant postdoctoral experience. Applicants should send a curriculum vitae, a short description of research interests and teaching experience, and have three letters of recommendation sent to: Carleen McNeely, Search Coordinator, Division of Basic Biomedical Sciences, University of South Dakota School of Medicine, 414 East Clark Street, Vermillion, SD 57069-2390. Review of applications will begin January 3, 2000, and continue until the position is filled. University of South Dakota is an Equal Employment Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY BEAVER COLLEGE (SUBURBAN PHILADELPHIA)

The Department of Biology invites applications for a full-time, tenure-track Assistant Professor position beginning fall, 2000. Responsibilities will include teaching a major's course in plant biology, a twosemester course in general biology (or interdisciplinary science for non-science majors) and ability to develop a course in evolution from a molecular perspective. Expertise in areas meeting other departmental teaching needs, including cell biology, conservation biology, and/or microbiology, may be considered. The successful candidate must have an earned doctorate and be broadly trained. A dedication to teaching (experience a plus) biology majors and preprofessional students as well as an interest in engaging undergraduates in research is expected. For full consideration, submit a letter of intent including research goals and teaching interests, curriculum vitae, and three letters of recommendation (by December 3, 1999) to: Dr. Archie J. Vomachka, Chair, Depart ment of Biology, Beaver College, Glenside, PA 19038. Telephone: 215-572-2199; FAX: 215-881-8758; e-mail: vomachka@beaver.edu. Beaver College is an Affirmative Action/Equal Opportunity Employer.

The Department of Pathology at the University of Illinois at Chicago seeks a faculty member at the AS-SISTANT PROFESSOR or ASSOCIATE PRO-FESSOR level (tenure-track) in the Division of Experimental Pathology with an interest in the biology or invasion and metastasis. Research interests in bio mechanics and the microcirculation of neoplasia are also desirable. The ideal candidate should be capable of developing a research program funded extramurally. This faculty member will be expected to participate in the teaching functions of the Department of Pathology. Qualifications include a Ph.D. or M.D./ Ph.D. with postdoctoral fellowship training or experience in areas appropriate to the research emphasis. Salary and rank will be commensurate with qualifications and experience. Candidates should direct inquiries and submit a curriculum vitae and the names of at least three references to: Robert Folberg, M.D., Professor and Head, Department of Pathology (M/C 847), University of Illinois at Chicago, 1819 West Polk Street, Chicago, IL 60612. For fullest consideration, submit curriculum vitae by December 9, 1999. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



MARY BABB RANDOLPH CANCER CENTER

SCIENTIFIC DIRECTOR LUNG CANCER PROGRAM

A dynamic Scientific Director is sought to lead the research efforts of the Sarah Crile Allen and James Frederick Allen Comprehensive Lung Cancer Program of the Mary Babb Randolph Cancer Center at West Virginia University. Appointment will be at the ASSOCIATE PROFESSOR or PROFESSOR level depending on applicant qualifications. Individuals should have an M.D., Ph.D., or M.D./Ph.D., and have an established research program in basic lung cancer biology or genetics. Opportunities exist for collaboration with other laboratory and clinical researchers within the cancer center, the Robert C. Byrd Health Sciences Center, and the lung disease programs of the National Institute for Occupational Safety and Health, which are located on the West Virginia University Health Sciences Center campus. Generous support is available for further development and expansion of the scientific base of this program. The Robert C. Byrd Health Sciences Center has a full complement of academic programs in the clinical and basic sciences and offers the advantage of the University setting within a small city with abundant outdoor activities available. Applications will be reviewed until the position is filled. Applicants should send a copy of curriculum vitae, a letter of interest with description of their current research program, and a list of three individuals who can provide references to: Fred R. Butcher, Ph.D., Director, MBR Cancer Center, P.O. Box 9300, West Virginia University, Morgantown, WV 26506-9300. Women and minorities are encouraged to apply. West Virginia University is an Affirmative Action/Equal Opportunity Employer.

The Department of Biology at the State University of New York College at Oneonta invites applications for a tenure-track ASSISTANT PROFESSOR position beginning in the fall 2000 semester. The initial appointment will be for two years with a 12 semester hours minimum teaching requirement per semester. Qualifications: A Ph.D. in biological sciences with emphasis in ecology or a related field. Evidence of ability to teach and develop departmental courses at all levels; ability to integrate computer-based technology into the curriculum preferred. Duties include: Teaching general ecology, environmental science and issues, and general biology. Other course offerings might include: conservation biology, environmental capstone seminar, plant ecology, wetlands ecology, or wildlife conservation. Opportunities for research and teaching exist at the Biological Field Station located in Cooperstown, New York. To apply, please send a current curriculum vitae, a statement of teaching and research interest, original transcripts, and three letters of recommendation to: Dr. William J. Pietraface, Chair, Search Committee, Department of Biology, Box S, State University College at Onconta, Onconta, NY 13820-4015. Review of applications will begin immediately and will continue until the position is filled. State University of New York Oneonta is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR ANATOMY AND PHYSIOLOGY Montana State University-Billings

Anatomy and physiology, Assistant/Associate Professor, tenure-track position beginning fall 2000 (contingent upon funding). For a detailed vacancy announcement and application procedures, contact the Human Resources Office, Montana State University-Billings, Chair, Anatomy/Physiology Search #2000-3, 1500 North 30th Street, Billings, MT 59101-0298. Telephone: 406-657-2278; FAX: 406-657-2120; website: http://www.msubillings.edu. Review of applications to begin January 21, 2000, and will continue until position is filled. Equal Employment Opportunity/Affirmative Action/Americans with Disabilities Act.

POSITIONS OPEN

TWO TENURE-TRACK ASSISTANT PROFESSORSHIPS

The Department of Bioscience and Biotechnology at Drexel University invites applications for two tenure-track positions at the Assistant Professor level from individuals with postdoctoral experience and records of significant research achievement in the following areas:

Cell Biology.

We seek an individual whose research area is eukaryotic cell signaling, cell differentiation or membrane transport and, ideally, will complement current research strengths in related areas.

Molecular Nutrition.

We seek a nutritionist who uses the tools of molecular biology/biochemistry to answer questions in human nutrition and will complement a departmental strength in clinical nutrition.

Successful candidates must be committed to the development of a strong and productive externally funded research program. Candidates should also demonstrate appropriate experience and/or a strong commitment to teaching at the undergraduate and graduate levels. The Department provides excellent laboratory facilities coupled with a competitive startup package. The search will remain open until positions are filled. Consideration of applications will begin January 1, 2000. Interested individuals should submit a curriculum vitae, comprehensive statements of teaching and research interests, and the names of three people who can be contacted for references to: Faculty Search Committee, Department of Bioscience and Biotechnology, Drexel University, Philadelphia, PA 19104. Telephone: 215-895-2623; FAX: 215-895-1273. An Equal Opportunity

ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR MICROBIOLOGY

The Department of Biology at Portland State University invites applications for a nine-month, tenuretrack faculty position at the level of Assistant or Associate Professor. Applicants must have a strong background in the application of molecular methods to the study of microorganisms. The successful candidate will be expected to develop and maintain a vigorous research program supported by extramural funding and to participate in graduate and undergraduate teaching activities of the Department. Applicants must have a Ph.D., postdoctoral research experience, and a commitment to teaching, research, and public service. Closing date for receipt of applications is December 10, 1999. Applications should include a complete curriculum vitae and the names and contact information for at least three references. Send applications to: Dr. David R. Boone, MMB Search Chair, Environmental Biology (ENV), P.O. Box 751, Portland State University, Portland, OR 97207-0751. Information on the university is available at website: www.pdx.edu and information on the current faculty is available at website: www.esr.pdx. edu/environ/envbio.html. Portland State University is an Affirmative Action/Equal Opportunity Institution.

ASSISTANT PROFESSOR. I.D.#9956 Department of Psychiatry, University of Illinois at Chicago (UIC), Seeks a tenure-track Assistant Professor, affiliated academically with the Department of Physiology and Biophysics, to perform research in the Psychiatric Institute. Candidates must possess a Ph.D. in pharmacology or a closely related scientific discipline, be interested in neuroglial activation and inflammatory responses associated with cognitive impairment in aging, and be versatile in techniques used to analyze gene and protein expressions at the cellular level using a combination of in situ hybridization biochemistry and immunohistochemistry and laser capture microdissection. Candidates are expected to have government funding in this area. Applicants should submit a curriculum vitae, statement of research program, and list of three references by January 31, 2000, to: Chair, Search Committee, c/o Ms. Ena Casas, Department of Psychiatry (M/C 913), University of Illinois at Chicago, 912 South Wood Street, Chicago, IL 60612-7327. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

Tenure Track Faculty Positions in Molecular Engineering

The Department of Biomedical Engineering at Washington University in St. Louis invites applications for junior or senior level tenure-track faculty positions in the field of Molecular Engineering. We are seeking candidates with a PhD or equivalent degree in bioengineering, biophysics or closely-related disciplines and who have exceptionally strong expertise and interest in developing and applying engineering principles to the study cellular and molecular processes. Areas of potential interest include cell mechanics, biopolymer structure and function, functional genomics, bioinformatics, high throughput screening, biotechnology, biomaterials, nanofabrication, single molecule spectroscopy, etc.

These positions represent a major expansion of the department supported, in part, by recent Development and Special Awards from the Whitaker Foundation that will enable the construction of a new building for the department. The department is closely affiliated with the Institute of Biological and Medical Engineering, a joint enterprise of the Schools of Engineering and Medicine that includes a large and diverse life sciences community.

Successful applicants at the junior level will be expected to establish an independent research program with extramural funding. Distinguished, senior level applicants with an outstanding record of educational and research accomplishments will be considered for one of the newly endowed chairs in the department. The successful applicant will be expected to establish research collaborations with other engineers and life scientists at Washington University. He/she would also be expected to develop and teach biomedical engineering undergraduate and graduate level courses. (Please visit our website: http://biomed.wustl.edu)

Applicants should send a curriculum vitae, a statement of their ongoing research program and future goals, and names of at least three references (plus addresses, fax, and email). Applicants may respond by email to beej@biomed.wustl.edu, or by mail:

Molecular Engineering Search Committee, c/o Beverly Spudich, Campus Box 1097, Department of Biomedical Engineering, Washington University, One Brookings Drive, St. Louis, MO 63130

Preference will be given to applications received before January 15, 2000. Washington University is an equal opportunity employer.





At Monsanto, we share a common goal - to help people lead longer, healthier lives. We are pioneering the use of life-science technologies to understand how the connections between human health, nutrition and agriculture can be used to develop products to improve the quality of life for everyone, everywhere.

Islet Cell Biologist

We are currently expanding our research efforts within the cardiovascular area to include studies designed to gain a better understanding of the effects of pharmaceutical agents on pancreatic cell function in animal models. We are seeking a research scientist with a Ph.D. in Cell Biology, Physiology, Pharmacology or related discipline and 2+ years of postdoctoral experience in The area of islet biology. Responsibilities include planning and executing animal studies to determine 1) The effect of various agents on islet function in animal models of diabetes and 2) The underlying biochemical mechanisms. The successful candidate will be highly self-motivated, independent and possess a strong background in techniques used to islet physiology, biochemistry and experience with animal models of diabetes. The ability to work with other scientists within an interactive/multidisciplinary team environment and to contribute new ideas to the study of islet biology and diabetes across the life sciences sector of Monsanto is essential. Critical thinking, innovation, and strong technical and communication skills are all required for this position, as is a record of prior accomplishments in the area of islet biology and diabetes.

This position is located in St. Louis, MO. We offer a competitive salary and benefits package including tuition reimbursement and 401(k). For fastest consideration, please submit your resume to: Staffing 99-2317, 700 Chesterfield Parkway, Mail Zone: BB5B, Chesterfield, MO 63198. EEO/AA Employer M/F/D/V. Please visit our website at www.monsanto.com



Food • Health • Hope"



BIOLOGY ASSISTANT PROFESSORS. The Department of Biology at Keene State College invites applications for two tenure-track positions at the Assistant Professor level beginning fall 2000. PLANT SYSTEMATICS/PLANT CONSERVATION BI-**OLOGY**: The ideal candidate can teach undergraduate courses in plant taxonomy and phylogeny, field botany, plant anatomy and morphology, plant conservation biology, and general education; supervise undergraduate research; and manage a small herbarium. Qualifications: Require Ph.D. completed by February 1, 2000, in botany, plant systematics, plant conservation biology, or related field; strong commitment to undergraduate teaching, to liberal arts education, and to an integrated biological perspective; good general knowledge of biology; some undergraduate teaching experience. Preference will be given to candidates with training in phylogenetic theory and analysis, familiarity with molecular systematics, a broad knowledge of plant natural history, and a good knowledge of the New England flora. DEVELOP-MENTAL BIOLOGY: The ideal candidate can teach undergraduate courses in developmental biology, cell biology, and introductory and non-major biology and supervise undergraduate research; has an integrated biological perspective and a good general knowledge of biology; and has a strong commitment to undergraduate teaching and to liberal arts education. Preference will be given to candidates with a broad background in developmental biology, including classical embryology and morphogenetic analysis, as well as modern molecular approaches to epigenetic control mechanisms. Knowledge of a specific group of organisms desirable. Qualifications: Require Ph.D. completed by February 1, 2000, in biology, developmental biology, or related discipline; some undergraduate teaching experience. Minimum salary for Assistant Professor: \$38,540. Keene State College is a public liberal arts college of the University System of New Hampshire with an enrollment of 5,000 students. The College has been recognized for its commitment to its mission, its broad-based strategic planning initiatives, and its cohesive sense of community. The College is located in the scenic Monadnock Region of southwest New Hampshire, near experimental forests and national forests. It owns the 400-acre Louis Cabot Preserve on Lake Nubanusit, while the City of Keene owns extensive conservation lands. The Biology Department prides itself on its strong curriculum and vigorous commitment to undergraduate education. Submit letter of application, curriculum vitae, clear description of undergraduate teaching experience, statement of teaching philosophy/methods, statement of research interests, and three letters of reference (addressing candidate's undergraduate teaching experience) by December 17, 1999, to: **Bot**any Search Committee or Developmental Biology Search Committee, Office of Human Resource Management, Keene State College, 229 Main Street, Keene, NH 03435-1604. Keene State College is a member of the Council of Public Liberal Arts Colleges, a national alliance of leading liberal arts colleges in the public sector. As an Affirmative Action/ Equal Employment Opportunity employer, we actively seek women and minority candidates.

FACULTY POSITIONS

Applications are invited for tenure-track positions at the ASSISTANT PROFESSOR level. Candidates must have a Ph.D., M.D., or equivalent with postdoctoral training. Candidates with anticipated/current national research funding and expertise in cancer biology, gene therapy, cardiovascular, or neuropharmacology employing state-of-the-art techniques are preferred, but outstanding candidates from other areas will be considered. The faculty are expected to carry on a vigorous research program supported by grants. Candidates should send a curriculum vitae, description of research plan, and names of three references by March 1, 2000 to: Krishna C. Agrawal, Ph.D., Regents Professor and Chairman, Department of Pharmacology, Tulane University School of Medicine, New Orleans, LA 70112. Tulane University is an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

TWO POSITIONS WEST VIRGINIA UNIVERSITY Department of Biology ASSOCIATE PROFESSOR

Individuals employing modern cellular and molecular approaches to investigate the biology of aging and/or signal transduction are invited to apply for a tenured/tenure-track position at the Associate Professor level. Candidates must possess the Ph.D. or equivalent degree. A record of continuous research productivity and funding, including current funding from national agencies, is required. The appointee is expected to continue to pursue an active, externally funded research program. Teaching qualifications for our undergraduate and graduate programs will be an important component of the applicant evaluation process.

ASSISTANT PROFESSOR

The Department of Biology is seeking a tenure-track assistant professor in the area of genomics/bioinformatics. The individual will be expected to teach courses supporting the University's Forensic Identification Program website: www.wvu.edu:80/~forensic/program.htm. The successful candidate will also be expected to develop an externally funded research program in the area of genomics/bioinformatics with an emphasis on laboratory analysis. Candidates must possess a Ph.D. or equivalent degree; at least three years of postdoctoral experience is preferred.

Applicants should send a curriculum vitae, a brief description of current and future research interests, a statement regarding teaching, and the names, addresses, and telephone numbers of four references to Chair of the appropriate Search Committee Chair (Dr. Philip E. Keeting-Associate Professor search, Dr. Keith Garbutt-Assistant Professor search, Dr. Keith Garbutt-Assistant Professor search in Department of Biology, P.O. Box 6057, West Virginia University, Morgantown, WV 26506-6057. E-mail: kgarbutt@wvu.edu. Review of applications will begin January 1, 2000. West Virginia University is an Affirmative Action/Equal Opportunity Employer. Women, minority, and disabled candidates are urged to apply.

CELL BIOLOGY University of California, San Francisco

The Department of Physiology and the Programs in Biological Sciences and Biomedical Sciences at the University of California, San Francisco (UCSF) seek an ASSISTANT or ASSOCIATE PROFESSOR, tenure-track, taking cellular, molecular, genetic, or other novel experimental or theoretical approaches to the biology of cells or systems. A successful applicant will be expected to mount an exciting research program, to participate in graduate and postdoctoral training, and to teach in graduate and professional school courses. The search will remain open until an appointment is made, but complete applications should be received by December 15, 1999, to ensure full consideration. Please send a curriculum vitae, one or two key publications, a two-page description of past research and future goals, and have three letters of recommendation sent to:

Search Committee Department of Physiology, Room S-762 513 Parnassus Avenue University of California San Francisco, CA 94143-0444

UCSF is an Affirmative Action/Equal Opportunity Employer.

HUMAN/SYSTEMS PHYSIOLOGIST and BIOMECHANIST (two tenure-track positions): University of Oregon–Assistant/Associate Professor Ph.D./postdoctoral experience with specialization in physiology or biomechanics, teaching undergraduate/graduate courses in human/exercise physiology or biomechanics. Direct inquiries to e-mail: bdutton@oregon.uoregon.edu. Send letter of application, curriculum vitae, research articles, and three letters of reference to: Position Searches, 1240 University of Oregon, Eugene, OR 97403-1240. Deadline: December 1, 1999, or until filled.

POSITIONS OPEN

PROTEIN CLASSIFICATION ANALYST

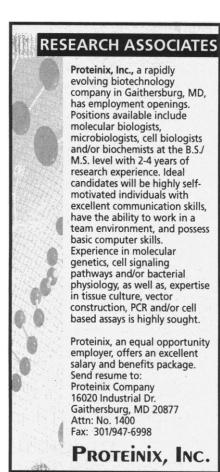
Scientific data analyst to participate in a protein family classification project. The project is based on the database of clusters of orthologous genes (COGS) from complete genomes recently developed at the National Center for Biotechnology Information, Responsibilities include review, analysis, and functional and phylogenetic annotation of protein sequence families, making extensive use of the National Center for Biotechnology Information's specialized and general sequence analysis software tools. Excellent opportunity to use state-of-the-art computer systems and gain experience using bioinformatics tools developed by a leading computational biology research group. This is not a laboratory position, but molecular biology laboratory experience is needed to understand and interpret the information in the database records. The project involves a strong research component; the successful applicant will have opportunities to participate in scientific publications. This position is with ComputerCraft Corporation, working as a contractor on location at the National Center for Biotechnology Information. M.S. or Ph.D. in molecular biology or related field required. Excellent oral and written communication skills required. Experience with computers, UNIX operating system, and sequence analysis software also important. Please mail, FAX, or e-mail résumé, cover letter, and references to:

> ComputerCraft Corporation 6701 Democracy Boulevard Suite 401 Bethesda, MD 20817 Attn: Molecular Biology FAX: 301-530-0634 E-mail: ghill@computercraft-usa.com

ASSISTANT PROFESSOR PLANT EVOLUTIONARY BIOLOGY

The Department of Botany at the University of Georgia invites applications for a tenure-track faculty position in the area of plant evolutionary biology. All aspects of plant evolutionary biology, including processes of plant speciation and genome evolution, will be considered. The successful candidate will be expected to develop a vigorous, externally-funded research program and to contribute to teaching at the undergraduate and graduate level. The Botany Department has strengths in several areas of plant biology and extensive links to other plant-related programs on campus. Further information is available at website: http://www.botany.uga.edu/. Candidates must have a Ph.D. and postdoctoral experience. Applicants should send a curriculum vitae, brief statements of research and teaching interests, pertinent reprints of up to five research papers, and have four letters of reference sent to: Dr. J. L. Hamrick, Chair, Plant Evolutionary Biology Search Committee, Department of Botany, University of Georgia, Athens, GA 30602. Inquiries may be addressed via e-mail: hamrick@dogwood.botany.uga.edu. Applications received by December 20, 1999, are assured full consideration. The University of Georgia is an Equal Opportunity Employer.

RESEARCH ASSISTANT/ASSOCIATE PRO-FESSOR POSITION available to study gene silencing and DNA methylation in prostate and breast cancer. Candidate should have prior experience in sub-tractive hybridization or differential display and demonstrate ability to secure grant support. The candidate will also provide technical advice to, and supervise the staff in the Molecular Pathology laboratory. Preference will be given to candidates whose interests interface well with the current faculty. POSTDOC-TORAL POSITION available to study epigenetic alterations in breast and ovarian cancer. Requirements include a recent Ph.D. with demonstrated experience in molecular biology and excellent written skills. Send curriculum vitae and names of three references to: Dr. Tim Huang, Department of Pathology, Ellis Fischel Cancer Center, University of Missouri, MO 65203. E-mail: Huangh@health.missouri.edu. Equal Opportunity/Affirmative Action Employer.



Postdoctoral Fellowship

Ernest Gallo Clinic and Research Center, a biomedical research institution affiliated with The University of California, San Francisco, seeks innovative and dynamic individuals for the following position:

Electrophysiology

A postdoctoral fellowship is available to study electrophysiology In *C. elegans*. Current projects involve genetic analysis of adaptive behavioral responses and mechanisms of neurotransmitter packaging and release. (See Nature 389, 870-876; Nature 364, 334-337; Nature 364, 337-341)

Applicants should have a Ph.D. Experience in electrophysiology and/or molecular biology and genetics is desirable.

Please send a curriculum vitae, preprints of papers in preparation or in press, and the names and addresses of references who can provide recommendations to:

> Antonello Bonci, M.D. and Steve McIntire, M.D., Ph.D. Department of Neurology, Programs In Neuroscience & Biomedical Sciences



The Ernest Gallo Clinic & Research Center

University of California, San Francisco, 1001 Potrero Avenue, Building 1, Room 101, San Francisco, CA 94110, Fax: (415) 648-7116, Email: bonci@itsa.ucsf.edu & slm@itsa.ucsf.edu Visit our website at: http://gallo.ucsf.edu

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Rensselaer

Dean

School of Science Rensselaer Polytechnic Institute

Applications and nominations are invited for the position of Dean of Science at Rensselaer Polytechnic Institute (http://www.rpi.edu).

Rensselaer is a private, coeducational, technological university comprising schools of Architecture, Engineering, Humanities & Social Sciences, Management & Technology, and Science, with approximately 400 faculty overall. The enrollment at the main campus in Troy, New York is 4800 undergraduate and 2000 graduate students, with an additional 2000 graduate students at the branch campus in Hartford, Connecticut (Rensselaer at Hartford).

The Dean of Science at Rensselaer reports directly to the Provost, and is the intellectual leader and administrative head of the School of Science, which includes approximately 100 faculty, 1000 undergraduate majors and 320 graduate students in 6 departments at the Troy campus (Biology; Chemistry; Computer Science; Earth & Environmental Sciences; Mathematical Sciences; and Physics, Applied Physics & Astronomy) and one department at Hartford (Computer and Information Sciences; 7 faculty and 400 graduate students). As the head of the School of Science, the Dean is responsible for the educational and research missions of the School through direct reports from the department chairs. As leader of the science faculty, the Dean formulates policy, pursues a dynamic yet balanced program of research and education, promotes interactions among disciplines both within and outside the School of Science, provides judgment on issues of program and faculty quality, and manages the budget. In all these activities and responsibilities, the Dean advances the Institute's commitment to intellectual, geographic, gender and ethnic diversity. The successful candidate will possess a strong record of scholarship and resource development in science and proven ability to manage a scientific organization or unit with imagination, resourcefulness, and skill in decision making.

Founded in 1824, Rensselaer is the oldest school of applied science and engineering in North America, and has evolved over the generations into a leading international technological university. Following recent wide recognition for innovation and excellence in undergraduate education, Rensselaer is now developing a strategic plan to enhance research and graduate and professional education. Areas identified for interdisciplinary development include (but are not restricted to) biosciences, applied mathematics, and information technology. The next Dean of Science will have an extraordinary opportunity to guide a distinguished science faculty and dynamic student body into the next century under the leadership of our new president, Dr. Shirley Ann Jackson.

Applications and nominations will be accepted until the position is filled. Materials (and inquiries) should be directed to:

Professor Bruce Watson, Chair, Dean of Science Search Committee c/o Linda Kramarchyk
Rensselaer Polytechnic Institute
Pittsburgh Building, Room 3114

Troy, NY 12180-3590 Phone: (518) 276-2148 Fax: (518) 276-2302

e-mail: Dean Search@rpi.edu

Web site: http://www.rpi.edu/web/sciencedean

Rensselaer is an Equal Opportunity, Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA BERKELEY COLLEGE OF NATURAL RESOURCES. Departments of Environmental Science, Policy and Management (ESPM) and Agricultural and Resource Economics and Policy (AREP)

The ESPM Division of Resource Institutions, Policy and Management and the Department of AREP invite applications for a nine-month tenure-track appointment in Environmental Policy, Health and Disease at the ASSISTANT PROFESSOR level, beginning July 1, 2000. We seek a person with an exceptional capacity to explain the impacts of public policy on social causes of ecological change and its human health consequences. S/he will engage faculty and students whose work includes, for example, the effects of river settlement patterns on mosquito-borne diseases and human nutrition; wildlife-vectored water contamination; relations between biodiversity and human health, and between climate change and human disease. S/he will teach a course on the social causes and consequences of ecologically-generated disease patterns, develop a graduate course in the field, and participate in team-taught courses oriented toward policy analysis and research methods. S/he will participate in the new Graduate Group on Health, Environment, and Development as well as in the departmental graduate programs. A Ph.D. is required in the social sciences, with expertise in public policy and the measurement of spatially dynamic processes. A working knowledge of ecology is highly desired. Please send a letter stating interest and qualifications for the position, curriculum vitae, all academic transcripts, and names of four referees before February 1, 2000, to: Chair, Environmental Policy Search Committee, Division of Resource Institutions, Policy and Management, 207 Giannini Hall, University of California, Berkeley, CA 94720-3310. The University of California at Berkeley is an Equal Opportunity/Affirmative Action Employer

ASSISTANT RESEARCH BIOCHEMIST

Part-time (75 percent) position available in Molecular and Cell Biology, Division of Biochemistry and Molecular Biology. Duties are to conduct research on the genetics, molecular biology, and biochemistry of DNA replication in Drosophila. Qualifications required include at least a M.A./Ph.D. or equivalent, a strong background in biochemistry of DNA replication, and a detailed knowledge of and technical skills in purification of proteins, baculovirus expression system, tissue cultures and in vitro DNA replication assays. Approximate starting date: January 1, 2000. Minimum salary is \$51,500 and salary is commensurate with experience; full benefits. Send résumé and names of three references by December 12, 1999, to: Professor Michael Botchan, University of California, Department of Molecular and Cell Biology, 401 Barker Hall, Berkeley, CA 94720-3202. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available immediately to work on NIH-supported project on lipoxygenase enzymes and their function in skin and other tissues. Prefer candidates with experience in molecular biology, analytical biochemistry, and/or working with mice. Send curriculum vitae and names of three references to: Alan R. Brash, Ph.D., Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN 37232-6602. Apply by November 19, 1999. E-mail: alan.brash@mcmail.vanderbilt.edu.

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION for Ph.D. scientist in the Infectious Diseases Division at the University of Pennsylvania to study herpes simplex virus pathogenesis. We are investigating the role of herpes simplex virus glycoproteins in immune evasion. This is an innovative project being performed in an outstanding environment for biomedical research. Send curriculum vitae to: Harvey Friedman, M.D., Chief Infectious Diseases, 536 Johnson Pavilion, Philadelphia, PA 19104-6073. Equal Opportunity/Affirmative Action/Minorities/Female/Disabled/Veterans.

POSITIONS OPEN

DESERT ECOLOGIST (ASSISTANT/ASSOCIATE PROFESSOR) The University of Texas at El Paso Department of Biological Sciences

The University of Texas at El Paso's Department of Biological Sciences and the Doctoral Program in Environmental Science and Engineering seek to fill a tenure-track position for an applicant with a focus on the human impact on desert ecosystems. Applicants with strong quantitative skills and an interest in community ecology are especially welcome. Available facilities include a 37,000-acre desert field station, 372acre wetlands wildlife preserve, and a remote-sensing laboratory. More information is located at website: www.utep.edu/biology. Candidates must have a strong commitment to teaching and research at both the undergraduate and graduate level, and the potential for obtaining experience. Submit résumé, statement of research interests, teaching philosophy, and listing of three references (name, address, telephone) to Ecologist Search Committee, The University of Texas at El Paso, Department of Biological Sciences, El Paso, Texas 79968-0519. The University of Texas at El Paso does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, or sexual orientation in employment or the provision of services. Women and minority candidates are particularly encouraged to apply.

COLUMBIA UNIVERSITY College of Physicians and Surgeons Department of Biochemistry and Molecular Biophysics

We are interested in hiring an X-ray crystallographer with interests in protein-nucleic acid interactions. Such studies might include transcriptional factors and their interactions with each other and DNA, protein-RNA interactions, or structures of proteins performing catalytic or structural functions with nucleic acids. Our department integrates biological structure with function through a highly interactive and collaborative faculty. We encourage applicants who have a special desire to be in such an environment, which integrates biophysical and biological approaches. We are prepared to provide the necessary financial support to initiate strong research programs. The department website can be visited at website: http://cpmcnet.columbia.edu/dept/gsas/biochem/ Applications should include a curriculum vitae and a brief statement of research goals. Three or more letters of reference should be sent independently. Material should be mailed to: Wayne A. Hendrickson, Search Committee, Biochemistry and Molecular Biophysics, Box 36, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

The Nature Conservancy seeks two LANDSCAPE ECOLOGISTS. One position requires expertise in spatial simulation modeling; the other in landscape-scale monitoring and spatial statistics. Both positions require: (1) a Ph.D. or M.S. in landscape ecology or closely related field; (2) three to five years of working experience applying landscape ecology concepts to biodiversity conservation or natural resources management; (3) experience in facilitation, training, and consultation; and (4) superior written and oral communication skills. For full job descriptions contact: Tim Whittier, 2404 Bank Drive, Suite 314, Boise, ID 83705, Telephone: 208-343-8826, e-mail: twhittier@tnc.org.

Postdoctoral RESEARCH ASSOCIATES are currently sought for our ongoing IMMUNOLOGY OF CANCER study at the New York University School of Medicine. This project examines immune response to cancer in both patient and animal models. Qualified applicants will have a Ph.D. or M.D. and a background that includes tissue culture, T-cell biology and/or protein purification. To apply, please forward a letter specifying your research interests and a curriculum vitae to e-mail: freya01@popmail. med.nyu.edu; or mail to: Dr. Alan Frey, Department of Cell Biology, New York University Medical Center, 550 First Avenue, New York, NY 10016. Equal Opportunity Employer.

POSITIONS OPEN

The Department of Chemistry at Illinois Wesleyan University invites applications for a tenure-track position in biochemistry at the rank of ASSISTANT PROFESSOR beginning fall, 2000. Candidates should possess a Ph.D. in biochemistry and be interested in teaching and conducting research in an American Chemistry Society-accredited undergraduate department that emphasizes close faculty-student interaction. A background in environmental chemistry is desirable. Illinois Wesleyan is an undergraduate university focused on the liberal arts, where teaching excellence is emphasized. Teaching responsibilities will include contributions to introductory through advanced courses. Successful candidates need also be willing to teach across the curriculum (e.g., chemistry courses for non-science majors, environmental science, freshmen seminar). The successful applicant will show evidence of being able to develop and sustain an active research program suitable for undergraduate involvement. Complete applications (a cover letter, curriculum vitae, transcripts, a description of teaching philosophy, and research plans including a list of equipment needs) and three letters of reference should be sent to: Dr. Jeff Frick, Chair, Department of Chemistry, Illinois Wesleyan University, Bloomington, IL 61701. More information about the department and facilities is available at website: http://titan.iwu.edu/~chem. For further information see our jobs web page at website: http:// www.iwu.edu/~iwujobs. Inquiries may be sent to e-mail: chem@titan.iwu.edu. Review of applications will begin immediately and continue until the position is filled. Illinois Wesleyan University is an Equal Opportunity Employer.

PLANT BIOLOGIST Frostburg State University

Frostburg State University seeks a Plant Biologist at the tenure-track ASSISTANT PROFESSOR level. RESPONSIBILITIES: Teaching courses in plant morphology and entry-level biology, contributing to general biology programs, directing undergraduate and graduate research, and establishing an active research program. MINIMUM QUALIFICATIONS: Ph.D. by time of hire; broad training in botany; ability to contribute to the general biology program; demonstrated potential for excellence in teaching and research. PREFERRED QUALIFICATIONS: Some background in horticulture, mycology and college teaching experience. To apply send a letter of interest; résumé; and the names, addresses, and telephone numbers of three professional references by February 1, 2000, to: Frostburg State University, Office of Human Resources, ATTN: Plant Biologist (Position #2000-1025-SCIENCE), Frostburg, MD 21532. Website: WWW.FROSTBURG.EDU. Frostburg State University is an Affirmative Action/Equal Opportunity Employer. Appropriate auxiliary aids and services for qualified individuals with disability will be provided upon request. Please notify in advance.

ASSISTANT PROFESSOR ENVIRONMENTAL STUDIES

Randolph-Macon College invites applications for a tenure-track position in earth science, beginning in fall 2000. A Ph.D. in geology or closely related field and the willingness to work collaboratively in teaching and research with faculty from other disciplines are required. Teaching experience and experience in a private liberal arts college are desirable. Teaching responsibilities include introductory geology, introductory environmental science, water resources, and senior seminar. The successful applicant must also initiate and sustain an active undergraduate research program. To apply send a letter of application, a curriculum vitae, a statement of teaching and research interests (all of which must be hard copies) and three letters of recommendation to: Dr. Brian W. Moores, Chair, Enviromental Studies Council, Randolph-Macon College, P.O. Box 5005, Ashland, VA 23005-5505. Telephone: 804-752-7245 or e-mail: bmoores@rmc.edu. The review of applications will begin on 1 December 1999, and continue until an appointment is made. Equal Opportunity Employer.

Postdoctoral Positions Biochemistry/Molecular Biology

The University of Michigan Medical School, Department of Dermatology is seeking highly motivated, creative scientists to fill postdoctoral fellowship positions. Research focuses on molecular mechanisms through which ultraviolet irradiation activates protein kinase signal transduction cascades leading to expression of gene products associated with destruction of connective tissue in human skin. These studies will also investigate the role of reactive oxygen species and cellular anti-oxidants as mediators of the ultraviolet irradiation response in human skin. Candidates with training in biochemistry, molecular biology and cell biology (immunohistology and in situ hybridization) are urged to apply. Selected applicants would join a 50-member multidisciplinary research team studying molecular mechanisms of skin repair. The ongoing comprehensive research effort provides a unique opportunity to study regulation of signal transduction and gene expression at the molecular level in a human organ in vivo (Nature, 379:335-339, 1996; New England Journal Medicine 337(20) 1419-1428, 1997; JCI 101: 1432-1440, 1998; and Nature Medicine 5(4) 418-422, 1999).

Send curriculum vitae and references to:

Dr. Gary Fisher, Department of Dermatology, University of Michigan, 1150 W Medical Center Drive, Med Sci I 6447, Ann Arbor, MI 48109-0609. FAX (734) 647-0076, e-mail: dianemch@umich.edu.

We encourage applications from candidates who will enrich and contribute to the cultural diversity of our University.



POSTDOCTORAL RESEARCH ASSOCIATE

Position is available for NIH funded research for a recent Ph.D graduate to join our group in the study of insulin like growth factor signaling on growth and survival of malignant cells (Cancer Res 59:886, 1999; Mol. Pharmacol 54:815,1998; Science 277:99, 1997). Applicants should have a strong background in molecular pharmacology and molecular/cell biology techniques. Send curriculum vitae with names of 3 references to:

Dr. Peter Houghton
Department of Molecular Pharmacology
St. Jude Children's Research Hospital
332 N. Lauderdale
Memphis TN 38105-2794

Equal Opportunity/Affirmative Action Employer

Bioinformatics and Computational Biology The University of Michigan



The University of Michigan is seeking applications from outstanding candidates for faculty positions at all levels and for staff positions at the Ph.D. level in our new Bioinformatics Program. We interpret the field of bioinformatics broadly to include microarray expression technologies, automated analysis of sequence data, large-scale systemic modeling, and management of evolving biological databases.

Michigan's Investments in the Life Sciences—This recruitment is part of a major expansion of bioinformatics in the Medical School and of an interdisciplinary Bioinformatics Program at the University level. The Program, which has \$10 million in start-up funds, an initial allotment of 5,000 sq. ft. of dedicated, contiguous space, and long-term institutional support, draws upon a broad base of established strength at Michigan in both the biomedical and computational sciences. The Bioinformatics Program also will benefit from and contribute to two important developments at Michigan. As part of a \$200 million Life Sciences Initiative, the University of Michigan is expanding faculty, buildings and infrastructure in the life sciences. As part of the Life Sciences Research Corridor Initiative, the State of Michigan is investing substantial resources in a new program that will benefit the universities, industries and research foundations within Michigan. Bioinformatics will be a major component in each of these initiatives.

Professor and Director of the Bioinformatics Program—This position will be filled by an outstanding senior investigator with an internationally recognized research program and demonstrated leadership in bioinformatics or computational biology. The Parke-Davis Pharmaceutical Division of Warner-Lambert Company has provided generous support for this position. Departmental affiliation(s) will be determined by the successful candidate and the participating departments. Major responsibilities include (1) recruiting at least four junior tenure-track faculty members, (2) guiding and developing the Program's research and curriculum, (3) awarding pilot research grants to stimulate collaborations, and (4) developing interactions within the University of Michigan and with other universities, government agencies, foundations, and industrial partners.

Assistant Professor Positions—Initially four tenure-track positions in bioinformatics or computational biology will be available, based in the Medical School. Appointments will be made in departments providing the best academic match for each individual faculty member, and joint appointments are encouraged. The successful candidates will be expected to develop a vigorous externally-funded research program and to participate in the teaching of the bioinformatics core courses. It is anticipated that additional positions will become available as part of recruitments in the College of Engineering, School of Public Health, and College of Science, Literature and the Arts. These faculty will also become part of the interdisciplinary Bioinformatics Program.

Head of the Core Facility—The research and educational functions of the Bioinformatics Program will have the technical support of a Bioinformatics Core Facility. The Head of the Facility will be responsible for (1) managing the sophisticated computer hardware, software and networking capabilities of the Facility, (2) providing liaison with the Medical Center Information Technology staff, (3) developing and testing alternative computational technologies for bioinformatics, and (4) providing computer support for computational biology courses being offered by the Program.

Applicants for all of these positions should send their current curriculum vitae, bibliography, names of three potential references, and a brief summary of future research plans to: Michael Savageau, Ph.D., Chair of the Bioinformatics Search Committee, 5641 Medical Science Building II, University of Michigan Medical School, Ann Arbor, Michigan 48109-0620. Review of applications will begin on November 1, 1999 and continue until the positions are filled.

The University of Michigan Medical School is an Affirmative Action/ Equal Opportunity Employer.

Biology: Marymount University invites applications for a Clare Boothe Luce ASSISTANT PROFES-SOR of Biology in the Department of Biological and Physical Sciences, beginning August 2000. This tenure-track position is funded by an endowment bequeathed to Marymount by Clare Boothe Luce. To qualify, an applicant must be female, a U.S. citizen, and must have recently earned a Ph.D. in biology or related field. The successful candidate will possess the ability to teach a non-majors course in biology, introductory biology lectures and laboratories, and a course in the area of expertise. Experience in secondary teacher preparation and/or interdisciplinary teaching is preferred. Ph.D. must be completed prior to start of employment; postdoctoral and some prior teaching experience at college/university level is preferred. It is expected that faculty, in addition to teaching, assume responsibilities for academic advising, curriculum development, committee service, research, and professional scholarship. Review of applications begins January 4, 2000, and will continue until position closed/filled. Marymount is an independent, comprehensive Catholic university that emphasizes excellence in teaching, attention to the individual, and values and ethics across the curriculum. To Apply: For official application contact: Personnel Services, Telephone: 703-284-1680 or e-mail: jobs@marymount.edu; or download employment application from our website: www.marymount. edu. Official application must include letter of application, completed Marymount University application form, curriculum vitae, and at least three letters of reference. Pos. # 14999. Current authorization to work in the United States required. TDD: 703-284-1516. Affirmative Action/Equal Employment Opportunity.

BIOLOGY ORGANISMAL BIOLOGIST MUNROE PROFESSOR OF LIFE SCIENCES

Wesleyan College seeks applicants for a tenuretrack position with an endowed chair at the ASSO-CIATE or full PROFESSOR LEVEL to begin fall, 2000. Ph.D. and commitment to undergraduate teaching required. Preference given to broadlytrained biologists able to develop and teach courses in developmental biology, introductory biology, and some of the following areas: biochemistry, immunology, and histology. Applicants should provide evidence of the ability to develop an active research program which engages undergraduate students. Wesleyan is a nationally ranked liberal arts college for women, with a unique seminar-based general-education curriculum and a research-based biological sciences curriculum, supported by current NIH and NSF grants. Submit letter of application, résumé, Transcripts, and three letters of recommendation by January 14, 2000, to: Dr. Hilary Kight, Chair, Natural Science and Mathematics, Wesleyan College, 4760 Forsyth Road, Macon, GA 31210. Women and minority candidates are strongly encouraged to apply. Affirmative Action/Equal Opportunity Employer.

Thiel College invites applications for a full-time, tenure-track position in its Biology Department. The successful candidate will teach an introductory course for Biology majors, Animal Kingdom, at least one course in the candidate's specific area of expertise, and a multi-disciplinary course required of all sophomores, The Sciences and Our Global Heritage. Additional responsibilities will include supervision of senior research projects, especially in the area of conservation biology, as well as supervising, maintaining and developing internships locally, nationally and internationally that support the conservation biology major. Cooperative interaction with the existing Environmental Sciences program is an expectation. Finally, the successful candidate is expected to develop and maintain a modest, active research program. Requirements include a Ph.D., background in invertebrate biology, and a demonstrated commitment to the area of conservation biology. Send letter of application, transcripts, and letter of recommendation to: Susan Swartzbeck, Director of Personnel Services, Thiel College, 75 College Avenue, Greenville, PA 16125. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGICAL SCIENCES: ASSISTANT PROFESSOR; full-time, ten-month, tenure-track. Ph.D. in Biology and a strong commitment to excellence in teaching. A strong preparation in population genetics/ecology preferred. Duties will include the teaching of cell biology, genetics and advanced courses in areas of the candidates choosing. Research/scholarly activity expected. Strong preference will be given to those applicants capable of using modern molecular techniques to study animal or plant populations in freshwater habitats. Deadline: January 15, 2000, or until position filled. Submit letter of application, résumés, and the names, addresses, and telephone numbers of three references to:

Mrs. Donna L. Sanders
Academic Services
Purdue University North Central
Westville, IN 46391
FAX: 219-785-5553
Website: http://www.purduenc.edu

Will provide application acknowledgment letter. Women, minorities, and individuals with disability encouraged to apply. An Affirmative Action/Equal Opportunity Employer.

DIRECTOR MONOCLONAL ANTIBODY FACILITY

The successful candidate will have several years of experience in monoclonal antibody production and laboratory organization and administration. The Director, will support the research groups, assisting projects and maintain inventories. There will be an opportunity to initiate individual research. Please send a letter of introduction, résumé, and three letters of reference to: Dr. Kenneth G. Mann, Department of Biochemistry, University of Vermont, Burlington, VT 05405. The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and people of diverse racial, ethnic and cultural backgrounds are encouraged to apply.

POSTDOCTORAL FELLOWS

Several postdoctoral positions are available immediately. Ph.D. and strong background in molecular biology and biochemistry are required. Send a curriculum vitae with names, telephone numbers and emails of three references to: Leonard Erickson, Ph.D., study of biochemical and molecular strategies to reverse anti-tumor drug resistance in human tumors. Ahmad R. Safa, Ph.D., study of novel mechanisms of action and resistance as well as regulation of genes involved in resistance to anti-cancer drugs and apoptosis in cancer cells. Indiana University Cancer Research Institute, 1044 West Walnut, R4-170, Indianapolis, IN 46202. FAX: 317-274-8046.

POSITIONS IN DEVELOPMENTAL REPRODUCTIVE BIOLOGY AND PROSTATE CARCINOGENESIS

Several positions for predoctoral students (Ph.D. candidates) and Postdoctoral Fellows are available to study mammalian primordial germ cell development, spermatogenesis, epididymis development and function, and prostate carcinogenesis. Experience in molecular biology, genetics, reproductive biology, developmental biology, or cancer biology are preferred. Send curriculum vitae to: Dr. Guang Quan Zhao, 209C Connaway Hall, University of Missouri, Columbia, MO 65211. E-mail: ZhaoG@missouri. edu.

NMR FACILITIES MANAGER. The University of Pennsylvania Department of Radiology seeks a Manager of its Animal and Clinical NMR Facility. The manager will be responsible for maintenance of instruments, schedúling, training prospective users, and assisting faculty and students in performing animal and clinical imaging and spectroscopy experiments. A Ph.D. is required. Applications should be sent to: Jerry Glickson, Ph.D., 422 Curie Boulevard, B1 Stellar-Chance Laboratories, Philadelphia, PA 19104 or to e-mail: glickson@mail.med.upenn. edu. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Qualified female and minority candidates are encouraged to apply.

POSITIONS OPEN

MOLECULAR GENETICIST ARIZONA STATE UNIVERSITY

We invite applications for a tenure-track position at the Assistant Professor level in the Department of Biology, beginning fall, 2000. A Ph.D. in related area and postdoctoral experience are required. Candidates for the molecular genetics position must have a primary research interest and record of accomplishments in the molecular genetics of eukaryotes. The successful candidate will join an expanding group of biologists in related areas (website: http://ls.la.asu.edu) and will have the opportunity to participate in a new initiative in basic biomedicine. Candidates will be expected to establish an active research program, to participate in graduate and undergraduate teaching, and to supervise graduate students in the Biology or Molecular and Cellular Biology graduate programs.

Applicants must submit a curriculum vitae, copies of selected reprints, a concise statement of present and projected research plans, and a statement of teaching interests, and arrange to have three letters of reference sent directly to: Chair of the Molecular Genetics Search Committee, Department of Biology, Arizona State University, Box 871501, Tempe, AZ 85287-1501. Review of applications will begin December 15th, 1999, and thereafter on the first and fifteenth of each month until the position is filled. Arizona State University is an Affirmative Action/Equal Opportunity Employer.

BRIDGEWATER STATE COLLEGE

ASSISTANT PROFESSOR, Genetics. The Department of Biological Sciences at Bridgewater State College invites applications for a full-time, tenuretrack position beginning fall 2000. The position requires teaching genetics, introductory biology and upper-level courses appropriate for the department's biomedical/molecular concentration, as well as participating in equipment procurement. The successful candidate must have an earned Ph.D., excellent communication skills, and a strong commitment to teaching and research in an undergraduate setting, as well as to advising undergraduate students and supervising original undergraduate research. Knowledge of human genetics and general zoology is desirable. Teaching experience is preferred. Please submit a letter of application, curriculum vitae, and the names, addresses and telephone numbers of three (3) professional references to: Office of Human Resources, Boyden Hall, Bridgewater State College, Bridgewater, MA 02325. Review of applications will begin on December 17, 1999, and will continue until position is filled. Bridgewater State College is an Affirmative Action/ Equal Opportunity Employer with a long-standing commitment to increasing the diversity of its employee community.

HEALTH RESEARCH ANALYSTS

ECRI, a nonprofit health services research organization, seeks individuals with the ability to work within a team-oriented "think tank" to assess the effectiveness and cost-effectiveness of medical devices, drugs, and procedures. Ph.D. in life or social sciences, ability to critically evaluate medical literature, excellent writing skills, and ability to simultaneously work on several projects. Knowledge of at least intermediate-level statistics or computer modeling required. Qualified applicants must complete a 25-page test report for which there is a small honorarium. Résumés and cover letter to: Department CT, ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462. FAX: 610-834-1275. Equal Opportunity Employer/Affirmative Action.

POSTDOCTORAL POSITION to study the molecular neurobiology of NPC1 protein. Applicant should have strong background in protein chemistry and molecular biology. Apply with curriculum vitae and names of three references to: Shutish Patel, M.D., Neurology Service, Veteran's Administration Connecticut Health Care System, Building Two, Room 2E-2121, 555 Willard Avenue, Newington, CT 06111. E-mail: shutish.patel@med.va.gov.

RPI, a leader in the development of ribozyme-based pharmaceutical products, is currently seeking an experienced scientist to join our Oligonucleotide Chemistry department in our facility in Boulder, Colorado:

Bio-Analytical Scientist

You will be responsible for bio-analytical assay methods development designed to support pre-clinical and clinical pharmacokinetics of drug candidates and *in vivolin vitro* metabolism studies. Qualifications include a degree in analytical chemistry and 5+ years of experience. Proficiency in extraction procedures from biological matrices and hands-on experience with HPLC, CGE and LC-MS/MS are required. Please refer to Job #007.

RPI offers a competitive compensation and benefits package, including stock options. For consideration, send a *curriculum vitae* and the names of three references to:

Ribozyme Pharmaceuticals, Inc., 2950 Wilderness Place, Job #007, Boulder, CO 80301. Fax: (303) 449-6995. E-mail: jobs@rpi.com

Visit our Web site at: www.rpi.com

No phone calls please. EOE



MOLECULAR NEUROPHARMACOLOGIST



On the edge and leading the way.

The University of Calgary is a contemporary university that builds a spirit of discovery and inquiry while delivering a dynamic life and 'quality learning experience.

The Neuroscience Research Group and Departments of Pharmacology & Therapeutics and Psychiatry invite applications for a basic scientist with particular expertise in presynaptic 7 helix transmembrane receptors. Research interests should lie in molecular biological aspects (regulation of gene expression, structure–function, localization), mechanisms of coupling to effector molecules, and/or pharmacology (receptors as targets for novel antipsychotic drugs, effect of drug binding on receptor expression and coupling to effectors). The candidate will join a research community in the Faculty of Medicine with interests in neuroscience (www.ucalgary.ca/-neuro) and ion channels (www.ucalgary.ca/UofC/research/molbiol/) in the rapidly growing Faculty of Medicine, which is in the process of building a major new research facility. While duties also include teaching and graduate student supervision, 75% of time will be protected for research. Calgary is a vibrant, multicultural city (pop. -850,000) located close to Banff National Park and the Rocky Mountains.

Qualifications include a PhD, MD or equivalent, and an established record of publications and demonstrated expertise in molecular neuropharmacology. Salary support and start-up funds are available initially through the Novartis Chair in Schizophrenia Research. Through successful application to the Alberta Heritage Foundation for Medical Research and/or the Medical Research Council of Canada, appropriate additional start-up funding and continuing salary support will be provided.

We seek applications from all interested persons. Please submit a curriculum vitae and a statement of research interests, and arrange to have three letters of reference sent directly, by December 31, 1999 to:

Dr. Keith Sharkey, Chair Neuroscience Research Group Faculty of Medicine 3330 Hospital Drive NW Calgary, Alberta, Canada T2N 4N1

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada, although all nationalities are encouraged to apply. The University of Calgary respects, appreciates and encourages diversity.

www.ucalgary.ca

ASSISTANT PROFESSOR OF MEDICAL SCIENCES IN BIOMEDICAL ENGINEERING BROWN UNIVERSITY

Applications are invited for a tenure-track faculty position as Assistant Professor in the Department of Molecular Pharmacology, Physiology, and Biotechnology beginning on or after March 15, 2000. We are seeking a candidate with a Ph.D. or Sc.D. or equivalent degree, or an MD-Ph.D. degree, interested in pursuing the application of cellular and molecular biology to drug delivery and organ replacement technology. Candidates must combine a biomedical engineering orientation with a working knowledge of both cell culture and recombinant DNA technology. Preference will be given to candidates with an interdisciplinary, applications-oriented focus. The successful candidate will be a member of a newly formed Center for Biomedical Engineering at Brown University. She or he is expected to be an active participant in an expanding teaching program, which includes undergraduate, graduate, and medical student education.

Candidates trained in biomedical engineering, drug delivery, and tissue engineering will be considered provided they have sufficient strengths in cell and molecular biology. Applicants should have at least two years of post doctoral training, or equivalent experience (possibly in industry), and must demonstrate potential develop an independent, externally-funded research program with the 3-4 year time frame. In addition, the candidate must show a potential for immediate productive contribution to existing research programs.

Applications received prior to March 15, 2000 will receive full consideration. Applicants must submit a curriculum vitae; three letters of reference; a two-page summary of research interests including teaching experience and future research plans, and up to three representative reprints. These materials should be sent to: Dr Michael Lysaght, Chair, Biomedical Engineering Search Committee, Department of Molecular Pharmacology, Physiology, and Biotechnology, Box G-B399, Division of Biology and Medicine, Brown University, Providence, RI 02912.

Brown University is an equal opportunity / affirmative action employer and encourages applications from women and minorities.



Staff Scientist Molecular Biologist/Virologist

The Laboratory of Molecular Hematology in the National Heart, Lung & Blood Institute is recruiting a doctoral level scientist for a Staff Scientist position (Title 42 appointment) to conduct research on adeno-associated virus.

Responsibilities include supporting scale-up production of recombinant AAV and generating novel recombinant vectors. Experience in molecular biology, virology and tissue culture is necessary. At least three years post-doctoral experience is required. This position provides full salary support with benefits and research support. Salary range is \$58,027 to \$75,433.

Applicants should submit a curriculum vitae and two letters of recommendation to:

Doug Price Administrative Officer, NHLBI Building 10, Room 7N220 10 Center Drive MSC 1670 Bethesda, MD 20892-1670

NIH is an Equal Opportunity Employer

COMPUTATIONAL/THEORETICAL ATMOSPHERIC CHEMIST Pacific Northwest National Laboratory Operated by Battelle for the U.S. Department of Energy Richland, Washington

The Pacific Northwest National Laboratory (PNNL) has an immediate need for a senior scientist within the Molecular Theory, Modeling and Simulation Group. The successful candidate will be responsible for assisting in developing, and actively participating in, a peer-reviewed effort in the area of atmospheric chemistry. A Ph.D. in chemistry, chemical engineering, physics and/or atmospheric sciences is required, and experience after the Ph.D. (such as a postdoctoral position) is desirable. Knowledge of statistical mechanics, molecular simulations, dynamical theories, and/or electronic structure theory as applied to molecular systems is required. Experience in the development of theoretical methods and implementation of computer codes for calculations of molecular processes in isolation, in solution, on surfaces or at interfaces is also required. Knowledge of methods applicable to the studies of molecular processes important in the atmosphere, including heterogeneous atmospheric processes, is highly desirable. The Pacific Northwest National Laboratory is located in Richland, Washington, and is a leader in basic and applied research in environmental and health science and technology. Interested persons are encouraged to apply electronically via our external website: http:/ jobs.pnl.gov/ referencing job number #45332. PNNL is an Equal Opportunity/Affirmative Action Employer and supports diversity in the workplace. Women, minorities, the disabled and Vietnam-era veterans are encouraged to apply.

The Combinatorial Chemistry Center at the University of Pittsburgh invites applications for the position of ASSISTANT DIRECTOR. The successful candidate would hold the rank of Research Associate. Major responsibilities will include maintenance and training of students on a 600 MHz LC-NMR with MAS capabilities, LC-MS and state-of-the-art combinatorial synthesis equipment. The Assistant Director will work collaboratively with research group and facilities support staff to solve analytical and synthetic problems in the context of combinatorial chemistry projects. Candidates must have a Ph.D. and substantial experience in multidimensional NMR. Starting annual salary will be \$35,000-\$40,000, depending on the level of experience. Applicants should send their curriculum vitae, letters of recommendations of at least three referees, and a statement of past work in the area of NMR spectroscopy and future career goals to: Professor Peter Wipf, Combinatorial Chemistry Center, Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260. All applications should be received no later than December 15, 1999; the search will continue until an appointment is made for the position beginning May 1, 2000. The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Applications from women and members of underrepresented minority groups are especially encouraged.

BIOLOGIST

Scientific data analyst to help build and maintain GenBank, the National Institutes of Health's gene sequence database produced by the National Center for Biotechnology Information. Responsibilities include review and analysis of DNA sequence submissions using state-of-the-art computer systems. M.S. or Ph.D. in biology or molecular biology required. Although this is not a laboratory position, extensive molecular biology laboratory experience is needed. Experience with computers and DNA sequence analysis software is also a plus. Excellent verbal and written skills required. Please FAX or mail résumé with cover letter to:

ComputerCraft Corporation Attn: Molecular Biologist 6701 Democracy Boulevard Suite 401 Bethesda, MD 20817 FAX: 301-530-0634

POSITIONS OPEN

SUPERVISORY RESEARCH PLANT PATHOLOGIST/MICROBIOLOGIST

The United States Department of Agriculture-Agriculture Research Service U.S. Horticultural Research Laboratory, Ft. Pierce, Florida, is seeking a Research Leader for the Subtropical Plant Pathology Research Unit. The incumbent serves as Research Leader and First Level Supervisor of an interdisciplinary group of research scientists and support personnel engaged in conducting a broad scale program of both basic and applied research aimed at the identification, characterization and development of novel control strategies for domestic and exotic pathogens and diseases of citrus, ornamentals, vegetables, and subtropical fruits. In addition to duties as Research Leader, the incumbent conducts personal research in one of the following areas: fungal and bacterial diseases; viral diseases of citrus; nematode diseases; or soil microbiology and alternatives to methyl bromide. Beginning annual salary ranges from \$67,298 to \$102,907. Applications must be postmarked by December 8, 1999 and submitted to: Pat Cahill, USDA, ARS, HRD, 5601 Sunnyside Avenue, Beltsville, MD 20705-5105. Refer to Announcement # ARS-XOS-0024. For more detailed application procedures, visit website: www.ars.usda.gov/ afm.hrd/resjobs. Candidates must be U.S. citizens.

United States Department of Agriculture—Agriculture Research Service is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

TRAVEL FELLOWSHIPS ASSOCIATION FOR CHEMORECEPTION SCIENCES (AChemS)

AChemS is pleased to announce the availability of fellowships for individuals interested in the chemical senses. The minority and clinical fellowships are funded by the National Institute on Deafness and Other Communication Disorders to defray the cost of travel, meals, lodging, and registration to attend the twenty-second meeting of AChemS, which will take place in Sarasota, Florida, April 26–30, 2000.

Minority Fellowships: Students, postdoctoral fellows, and faculty who identify themselves with a minority group may apply for the minority fellowships. Clinical Fellowships: Resident clinicians (dentists

and physicians) may apply for the clinical fellowships. Awardeees will be selected according to their academic background, experience, and research interests. Applicants need not be AChemS members, but must be U.S. residents. Applicants are requested to submit a brief statement of research interests, curriculum vitae, two letters of recommendation, and, for the minority fellowship, an indication of the minority group with which they identify by January 14, 2000, to: Travel Fellowship Committee, AChemS Business Office, 744 Duparc Circle, Tallahassee, FL 32312-1409. Please indicate in your cover letter which fellowship you are applying for.

CURATOR INVERTEBRATE ZOOLOGY

The University Museum and the Department of Environmental, Population, and Organismic Biology (E.P.O.) at the University of Colorado at Boulder invite applications for a joint, tenure-track, ninemonth appointment as Curator of Invertebrate Zoology and Assistant Professor of Biology. Responsibilities will include curation and development of the Museum's invertebrate collections (excluding insects and spiders), conducting an active research program on the systematics or evolutionary biology of invertebrates, and teaching courses in the Museum and E.P.O. Biology. A strong record of published research and appropriate curatorial experience are important. Please send curriculum vitae, representative publications, statements of research, teaching and curatorial experience, and the names and addresses of four references to: Dr. Deane Bowers, University of Colorado Museum, Campus Box 218, Boulder, CO 80309-0218. Review of applications will begin on 31 December, 1999. The University of Colorado is committed to diversity and equality in education and employment.

POSITIONS OPEN

RESEARCH ASSISTANT needed by southwest Ohio university to coordinate laboratory research involved in understanding the molecular mechanisms of stress. Design and execute laboratory research experiments in molecular and cellular biologic methods regarding tissue culture systems involving neural tissues and clonal cell lines, directed toward understanding the role of gene expression in the nervous system following stress. Measure corticotropin-releasing factors, gene expression, and protein levels through use of molecular measurements of in situ hybridization, immunocytochemistry, quantitative polymerase chain reaction, radioimmunoassay, and receptor binding. Must have M.S. in biology or biochemistry. Must have one year in job offered or one year experience in measuring gene expression and protein levels through use of molecular measurements of in situ hybridization, quantitative polymerase chain reaction, and ra-dioimmunoassay. Work schedule: 40 hours per week 8 a.m.-5 p.m., Monday through Friday. Rate of pay \$33,800 per year. Must have proof of legal authority to work permanently in the United States. Send two résumés and cover letter (NO CALLS) to: ES Sp Prgms, REF# 5324JD, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

SENIOR RESEARCH SCIENTIST BIOCHEMISTRY

U.S. Army Soldier and Biologocal Chemical Command U.S. Edgewood Chemical Biological Center (ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Conduct research on cellular mechanisms, including metabolic pathways, cell signaling, molecular aspects of pathogenesis and virulence; natural cellular products including both natural and heterologous proteins; and taxonomic classification of viruses and bacteria using genetic and morphological indicators. Serve as national/international authority in various areas of biochemistry. Required: Ph.D. in biochemistry, chemistry, microbiology, or equivalent doctoral degree related to the work of the position. Salary Range: \$96,790-\$125,900. Applications: Telephone: 703-289-5493; e-mail: biochemjobs@yahoo.com; address: Ms. Amy Booth, 3190 Fairview Park Drive, Suite 968, Falls Church, VA 22042. Applications must be postmarked by 18 February 2000. Equal Opportunity Employer. U.S. citizenship required.

PRODUCT SAFETY SCIENTIST/ TOXICOLOGIST The Clorox Company

The Clorox Company is a premier international marketer and manufacturer of consumer products. We are looking for a results-driven Product Safety Scientist to join our team in Pleasanton, California. In this role, you'll serve as a liaison for Product Safety, Environment, and Regulatory Compliance on new product development teams. Represent Clorox interests at trade associations and with regulatory agencies. Monitor and evaluate toxicology tests. Perform health and safety risk assessments of Clorox products. Minimum Requirements: Ph.D. in Toxicology/Biology with zero to two years experience or M.S. with four to six years experience in consumer products or toxicology field. Requires excellent communication skills, and the ability to confidently make recommendations on risk management issues affecting consumers and workers. Please send résumés to e-mail: alyssa. thach@clorox.com.

RECEPTOR PHARMACOLOGIST at the University of Cincinnati Surgery Department to study receptors and second messengers of neuropeptide Y hormones. Candidates with Ph.D. or M.S./B.S. with relevant experience may apply. Basic molecular biology/in vivo models experience advantageous. One year appointment may be renewed. Send curriculum vitae to: Professor Balasubramaniam, e-mail: Ambi. bala@UC.EDU or FAX: 513-558-0750.

PHARMACOLOGIST

Chemopreventive Agent Development Research Group Division of Cancer Prevention, National Cancer Institute, NIH

GS-0405-14; Vacancy Announcement #: NCI-99-2730

The Chemopreventive Agent Development Research Group, DCP, NCI plans, develops and directs an extramural preclinical agent discovery, efficacy, and safety testing program and a clinical testing program for the chemoprevention of cancer, which can be defined as the use of natural or synthetic agents administered to prevent, inhibit, or reverse one or more stages of carcinogenesis. The Pharmacologist in the Chemopreventive Agent Development Research Group will be responsible for: (1) managing and directing pharmaceutical support contracts related to agent acquisition, synthesis, formulation, characterization, and supply of preclinical and clinical finished agents, (2) chemistry, manufacturing, and control issues related to Investigational New Drug applications to the FDA, (3) other preclinical and clinical agent development activities in his/her additional areas of professional competence, such as in the areas of preclinical toxicology and clinical phase 1 pharmacokinetics, and (4) liaison management with the pharmaceutical industry. Candidates for this position are required to have a Ph.D., Pharm.D. D.V.M., Sc.D. or equivalent training and general knowledge and experience in the field of pharmacology, medicinal chemistry, or pharmaceutical science and specific knowledge and experience in research in one or more areas of pharmacology, pharmaceutical science, regulatory affairs, toxicology, drug development, carcinogenesis, and/or other relevant scientific disciplines that included at least 30 semester hours in chemistry and physiology, and 12 semester hours in pharmacology. The salary range will be from \$68,570 to \$89,142.

To apply for this position, please address the following rating criteria: (1) Knowledge of pharmacology and the scientific disciplines appropriate for the position; (2) Ability to communicate orally and in writing; (3) Ability to plan and manage research programs involving complex administrative and scientific issues; (4) Ability to review and evaluate scientific studies related to program objectives; (5) Ability to interact productively with other scientists.

Please submit your application/resume to: NIH/National Cancer Institute, Human Resource Management & Consulting Branch, EPS, Suite 550, 6120 Executive Blvd., Rockville, MD 20852-7211. For further information regarding application procedures, you may call the staffing office at 301-402-2789. Applications must be postmarked no later than December 3, 1999.

NIH is an Equal Opportunity Employer. Applicants must be US Citizens.

Combinatorial Chemistry and Drug Discovery at Coelacanth

Coelacanth Corporation is a privately held biopharmaceutical company founded by K. Barry Sharpless dedicated to the acceleration of drug discovery through the use of both high-speed synthesis, novel chemical building blocks, and pre-clinical screening technologies. The direct application of these technologies to the identification and optimization of drug candidates is the focus of our team-based efforts. Coelacanth is expanding its research groups and currently has openings for the following positions.

LIBRARY SALES AND MARKETING MANAGER

The candidate will be responsible for establishing relationships with pharmaceutical and biotechnology companies for the sales and marketing of novel chemical libraries for drug discovery. The candidate should be capable of developing long-term strategic alliances with targeted companies, and be able to take the initiative to spot and pursue business opportunities including the negotiation of contracts. He/she will also be interacting closely with Coelacanth's VP of Chemistry and a team of scientists dedicated to the design and production of innovative compounds. The candidate will be responsible for management of the existing customer base and developing marketing strategies and communications. The qualified candidate will have a degree in a business-related field such as marketing, finance with a strong background in chemistry or pharmacology being required. In addition, a minimum of 3 years experience in sales and marketing in the biopharmaceutical field is required. Exceptional skills in presentation, interpersonal communication, and negotiation are critical.

MANUFACTURING PROCESS MANAGER

The candidate will be responsible for coordinating the production and distribution of chemical libraries. The candidate should have a Ph.D. or an MS degree in Chemistry or Chemical Engineering or a related field. He/she should possess 3-5 years experience in optimization of manufacturing process including scheduling of automation/production, allocation of resources, and strategic planning up to the delivery to customers.

Synthetic Chemist

We are seeking a qualified candidate at the Ph.D. level for our library building block production facility. The candidate will be involved in the design and production of novel reagents on a >50 g scale. He/she should have experience in organic synthesis, process chemistry and should possess a good knowledge of analytical techniques. Good interpersonal skills and the ability to work in a team environment are critical.

MEDICINAL CHEMIST

We are seeking an outstanding medicinal chemist at the Ph.D. level. A minimum of 4 years experience in industrial drug discovery/development is required. Candidates should also possess a good knowledge in computational chemistry. The position involves the design and synthesis of targeted combinatorial libraries as well as the optimization of leads using parallel synthesis and 'traditional' medicinal chemistry approaches.

Analytical Chemistry - Drug Discovery

We are seeking outstanding candidates at both the Ph.D. and BS/MS levels. The candidates will become part of a group dedicated to the characterization of pharmacological properties of compounds in chemical libraries and in drug discovery programs. The group utilizes a panel of high-throughput in vitro screens for predicting ADME and toxicological profiles. Experience in the implementation and maintenance of LC/MS systems to support drug discovery is required. Prospective candidates should have excellent separation skills for the development of flexible LC/MS and LC/MSMS methods to analyze multicomponent mixtures in support of drug discovery studies.

Coelacanth is located in central New Jersey. We offer a highly competitive salary and benefits package including an employee stock option plan and 401K. Qualified individuals should send a cover letter and resume indicating the position of interest to:

Coelacanth Corporation Attn: Human Resources FAX: (609)-448-8299

Email: resume@coelacorp.com

www.coelacorp.com



COELACANTH

FISHERY SCIENTIST

The Chesapeake Biological Laboratory (CBL), part of the University of Maryland Center for Environmental Science (UMCES), seeks a fishery scientist for tenure-track position at the ASSISTANT PRO-FESSOR level. We seek candidates with postdoctoral experience, who are productive researchers, and who will be effective teachers and mentors of graduate students in the University System-wide MEES graduate program in environmental sciences. We seek applicants with expertise in the areas of stock assessment and population dynamics in either fin- or shell-fish fisheries. We seek a colleague who can undertake research at the interface between fisheries science and management. Candidates with backgrounds that also include bioeconomics modeling are also encouraged to apply. Excellent opportunities exist for interdisciplinary research through collaboration with fisheries, toxicology, environmental chemistry, and ecology groups at Chesapeake Biological Laboratory and with ecologists and oceanographers at our sister laboratories in University of Maryland Center for Environmental Science (Horn Point Laboratory and Appalachian Laboratory). Application should include a personal statement of qualifications and interest, curriculum vitae, and names of at least four references. To insure full consideration, applications should be received by 10 January 2000. Anticipated appointment is summer/fall 2000. Send applications to: Dr. Edward Houde, Chair, Fisheries Search Committee, Chesapeake Biological Laboratory, UMCES, P.O. Box 38, Solomons, MD 20688-0038. We are committed to faculty diversity and specifically encourage applications from women and minority candidates. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

NIEHS, NIH has a postdoctoral position available immediately to study polymorphisms, gene structure, and structure activity of the human CYP enzymes. Technical experience in molecular genetics and biochemistry is needed in several of the following areas: Cloning techniques, strategies for genomic mapping and sequencing of PAC or YAC clones, strategies for detection of polymorphisms, DNA sequencing, molecular biology of CYP enzymes, site-directed mutagenesis, use of cDNA expression systems such as bacteria. Requires a Ph.D. in biochemistry, molecular genetics, molecular pharmacology, or related field. Applicant must have less than five years of postdoctoral experience. The initial appointment is renewable up to five years with a starting salary of at least \$26,500 depending on experience. US citizens or permanent residents. Non-US citizens can be hired thru an F-1 Visa. Applicants should submit a cover letter, curriculum vitae, and the names of three references to: Dr. Joyce Goldstein, NIEHS, P.O. Box 12233 (A3-02) Research Triangle Park, NC 27709. Telephone: 919-541-4495; FAX: 919-541-3647; e-mail: Goldstel@niehs.nih.gov.

POSTDOCTORAL ASSOCIATE wanted for a long-term project on plant-animal interactions. Focus on fruit production and consumption by birds in South Carolina, USA. Information available at website: http://www.zoo.ufl.edu/dlevey/SRSproject. htm. Send letter of interest, curriculum vitae, and three letters of recommendation to: Doug Levey, P.O. 118525, University of Florida, Gainesville, FL 32811-8525. Deadline: January 7, 2000

RESEARCH ASSOCIATE/POSTDOCTOR-AL FELLOW—ION CHANNELS. Lead role in molecular physiology of ion channels involved in Ca²⁺ signaling (InsP₃ receptor), disease (cystic fibrosis, CFTR) and apoptosis (bcl/bax). Molecular, genetic, biochemical, electrophysiological and imaging approaches are used to examine structure/function and protein-protein interactions. Strong background in single channel electrophysiology/analysis required. Send curriculum vitae and names of three references to: Dr. Kevin Foskett, Department of Physiology, Room B39 Anatomy-Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6805. FAX: 215-573-6808. The University of Pennsylvania is an Equal Opportunity Employer. Qualified women and minority applicants are encouraged to apply.

POSITIONS OPEN

We are seeking tenure-track faculty at the rank of ASSISTANT/ASSOCIATE PROFESSOR or PROFESSOR with active research programs in human molecular genetics. DNA damage and repair, or genetic susceptibility (SNPs; polymorphisms) and disease. These positions are available in the Institute of Chemical Toxicology. Competitive start-up packages are provided, and membership in the Environmental Health Sciences Center in Molecular and Cellular Toxicology with Human Applications, the Comprehensive Cancer Center, and the Center for Molecular Medicine and Genetics provides additional opportunities for professional interactions, pilot project funding, and facility core support. This represents a unique opportunity to enter a growing program in human genetics/genetic susceptibility and molecular epidemiology. Your curriculum vitae should be sent to: Dr. Mark Hughes, Chair, Search Committee, The Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654. Information on the Environmental Health Sciences Center and Institute of Chemical Toxicology may be viewed at website: http://www.wayne.edu/ehsctr. Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

VERTEBRATE PHYSIOLOGICAL ECOLO-GIST. The Biology Department of Saint Mary's College of Maryland invites applications for a tenuretrack, assistant professor in vertebrate physiological ecology for the fall of 2000. Applicants must hold a Ph.D. and have demonstrated teaching excellence. Teaching responsibilities include comparative animal physiology, ecology and evolution, and participation in introductory courses for majors and non-majors. Opportunity exists for advanced courses in the candidate's specialty. The successful candidate will be expected to develop an active research program involving undergraduates. Saint Mary's College of Maryland, the state's honors college, is a public liberal arts institution located 70 miles southeast of Washington, D.C., on the shores of the tidal Saint Mary's River. The talented and diverse student body is coeducational and numbers 1600. Students complete a rigorous curriculum and year-long senior project. Send cover letter (with e-mail address), curriculum vitae, descriptions of teaching interests and research, plus three letters of reference to: Dr. Robert W. Paul, Chair, Biology Search Committee, St. Mary's College of Maryland, 18952 East Fisher Road, St. Mary's City, MD 20686-3001. St. Mary's College of Maryland is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Postdoctoral position available immediately in the Department of Immunology, Baylor College of Medicine, under the supervision of Dr. David M. Spencer. The project focuses on the application of a unique technology for making conditional signaling molecules to build and analyze animal models for prostate cancer and benign prostatic hyperplasia. Applicants with a Ph.D. or an M.D./Ph.D. with a strong background in molecular biology and signaling, and prior experience in cancer biology are preferred. Competitive salary commensurate with qualifications and experience. Please send letter of interest, curriculum vitae and names/addresses of three references to: Dr. David M. Spencer, Department of Immunology, Baylor College of Medicine, One Baylor Plaza, M929, Houston, TX 77030; e-mail: dspencer@ bcm.tmc.edu. Equal Opportunity, Affirmative Action and Equal Access Employer.

POSTDOCTORAL POSITION available to study production and release of a sea lamprey sex pheromone. Candidate with background in endocrinology, biochemistry, and cell biology, and skill in RIA, ELISA, HPLC, microchemical analyses, and cell culture is desirable. Starting no later than March 2000 for duration of three years. Salary to \$35,000, with full benefits. Send curriculum vitae and three references to: Weiming Li, Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI 48823 USA. E-mail: Liweim@pilot.msu.edu.

POSITIONS OPEN

SCIENTIFIC DATA ANALYST (REFSEQ PROJECT) National Center for Biotechnology Information,

ComputerCraft Corporation

Scientific Data Analyst to participate in a sequence analysis and curation project. The RefSeq project, built and maintained at the National Center for Biotechnology Information (NCBI) at NIH, provides reference sequence standards for chromosomes, mRNAs, and proteins. RefSeq curation involves the use of specialized databases, bioinformatics software, and literature review to curate highly annotated sequence records for human and vertebrate model organisms. This involves reviewing available sequence data to generate the most complete, accurate representative reference sequence possible and to expand the annotation associated with that reference sequence. This is an excellent opportunity to use stateof-the-art computer systems and gain experience using bioinformatics tools developed by a leading computational biology research group. Additional information about the RefSeq project is available at website: http://www.ncbi.nlm.nih.gov/LocusLink/ refseq.html. This position is with ComputerCraft Corporation, working as a contractor on location at NCBI. This is not a research position, but extensive molecular biology laboratory experience is needed to understand information in the database records, literature, and sequence analysis. M.S. or Ph.D. in molecular biology or related field required. Excellent oral and written communication skills required. Experience with computers and DNA sequence analysis important. Please mail or FAX résumé with cover letter and list of references to: ComputerCraft Corporation, ATTN: RefSeq Position, 6701 Democracy Boulevard, Suite 401, Bethesda, MD 20817. FAX: 301-530-0634.

RESEARCH ASSOCIATE POSTDOCTORAL FELLOW

Position available immediately in the Department of Biochemistry and Molecular Biology at the Uniformed Services University of the Health Sciences (USUHS) to carry out enzymological, biochemical, and molecular biological research in the laboratory of Dr. David A. Grahame on the structure and function of two novel metalloenzyme systems in the Archaea. Candidates with a Ph.D. and a strong background in chemistry, biochemistry, and enzymology are encouraged to apply. Send curriculum vitae and names/addresses of three references by 10 January 2000 to:

> David A. Grahame, Ph.D. Associate Professor Department of Biochemistry and Molecular Biology E-mail: dgrahame@usuhs.mil 4301 Jones Bridge Road Bethesda, MD 20814-4799

USUHS is an Affirmative Action/Equal Employment Opportunity Employer.

LABORATORY SPECIALIST LABORATORY SPECIALIST ADVANCED

Seeking entry level biochemist for available Laboratory Specialist position. Candidates should have a minimum B.S. degree in chemistry, biochemistry, or related field with cursory laboratory training. Experience helpful. Laboratory Specialist Advanced position also available. Candidates should have a B.S. degree, M.S. preferred. Must have demonstrated experience in current techniques of biochemistry. Commonwealth Biotechnologies, Inc. (CBI) is a cutting edge biotechnology company located in Richmond, Virginia. This is an opportunity to join a rapidly growing and dynamic research and development support facility, dedicated to providing state-of-the-art analytical services to the biotechnology industry. Salary is commensurate with experience and background; excellent benefits package offered. Send résumé, cover letter, and the names of three references to: Director of Human Resources, CBI, 601 Biotech Drive, Richmond, VA 23235, or FAX: 804-648-2641, e-mail: hr@cbi-biotech.com.

Signature Program in Plant Science University of Nebraska-Lincoln

The University of Nebraska-Lincoln is sponsoring a major new research initiative in plant genomics. As part of this initiative, we invite applications for three 9- or 12-month, tenure-track ASSISTANT, ASSOCIATE or FULL PROFESSOR positions. Candidates must have a Ph.D. or equivalent degree and postdoctoral training, with preferences given to candidates interested in pursuing fundamental research utilizing modern genomics technologies. Applicants at the senior level must have developed a nationally/internationallyrecognized research program. The successful candidates will be expected to establish vigorous, competitively funded, independent research programs. The three positions will be housed within the George W. Beadle Center for Genetics and Biomaterials Research, a modern, state-of-the-art research facility on the UNL campus, and will be provided with excellent laboratory facilities, generous startup support, and the opportunity for steady, long-term support to their programs. The successful applicants will have the opportunity to select an academic home department, with joint appointment to the Center for Biotechnology. Teaching responsibilities, likely to involve one course per year in the applicant's area of expertise, will be negotiated depending on the home department selected. Demonstrated experience in teaching and/or acquiring independent funding is highly desirable.

Plant Developmental Biologist. Areas of particular interest include, but are not limited to, plant developmental signals associated with light sensing, organellar biogenesis, transmission and turnover, and cellular differentiation.

Biochemical Geneticist. Emphasis on investigation of important plant metabolic or signaling pathways using genetic/genomic approaches. Areas of interest include the genetic dissection of biosynthetic pathways or their regulation, mechanisms of RNA/protein turnover, identification of membrane receptors, and novel product engineering in plants.

Microbial Geneticist. Emphasis on basic genetic analysis of important cellular processes in a prokaryotic or eukaryotic, plant-associated, microbial system. Some areas of interest include cell replication and division, pathogenesis, nutrient metabolism and environmental sensing, genome rearrangement and molecular evolution.

Applications will be accepted to January 3, 2000 (or until suitable candidates are identified for each of the positions). Interested persons should submit a letter of application, a summary of teaching and research goals, and a curriculum vitae with names, addresses, and email/fax numbers of three references to: Dr. Sally Mackenzie, PSI Search Committee Chair, Center for Biotechnology, University of Nebraska, N300 Beadle Center, Lincoln, NE 68588-0665.

UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity; is responsive to the needs of dual career couples; and assures reasonable accommodation under the Americans with Disabilities Act. Contact Dr. Mackenzie at 402-472-6997 for additional information.

GRANTS





EUROPEAN CHEMICAL INDUSTRY COUNCIL

SECOND CALL FOR GRANT APPLICATIONS

The European Chemical Industry Council (CEFIC) is funding basic research into health and environmental effects of chemicals. One of the governing principles of the Long-range Research Initiative (LRI) is that research will be carried out by internationally recognised, independent research experts. A science panel consisting of experts from academia and research institutes will oversee the programme. ECETOC, the European Centre for Ecotoxicology and Toxicology of Chemicals, will manage the programme for CEFIC. Research results will be published in peer reviewed journals and communicated widely via workshops, open literature and internet.

CEFIC therefore invites grant applications from research institutes in the areas of:

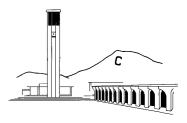
- · marine risk assessment and ecosystem dynamics;
- environmental exposure modelling;
- human exposure

Project specifications including budget details and an application form can be found on the CEFIC-LRI website: http://www.cefic.org/lri. Deadline for receipt of proposals is 15 February 2000. Only proposals on an official CEFIC-LRI application form and that fit the published project specifications will be taken into consideration. These should be sent electronically to rta@cefic.be; Dr. Rob Taalman, CEFIC-LRI, Avenue E. van Nieuwenhuyse 4, bte 2, B - 1160 Brussels, tel. +32 2 676 73 28.

UNIVERSITY OF CALIFORNIA, RIVERSIDE

FACULTY POSITIONS STRUCTURAL BIOLOGY (X-RAY CRYSTALLOGRAPHY)

Applications are invited for 2-3 tenure-track faculty positions in the College of Natural and Agricultural Sciences, University of California, Riverside. Applicants should have



strong credentials in the broad area of structural biology using as their principal approach protein X-ray crystallography. We anticipate that an internationally recognized scholar at the full professor level will fill one position; the rank of the other two positions is open. Successful applicants will hold the doctoral degree or equivalent, and will be expected to develop and maintain a productive independent research program as well as participate in undergraduate-, graduate-, and postdoctoral-level training activities. Mid-career and senior scientist applicants must have well-funded research programs. A generous and competitive start-up package will be provided to the successful candidates. The departmental affiliation for the positions will likely be in Biochemistry but alternatively could be in the Departments of Cell Biology/Neuroscience or Chemistry. The position is available July 1, 2000. Applicants should forward a complete curriculum vitae, a list of three names and addresses from whom letters of reference might be obtained, and a summary of their future research directions to: Structural Biology Search Committee, College of Natural and Agricultural Sciences, University of California, Riverside, CA 92521. Review of applications will begin January 15, 2000, and will continue until the position is filled. Check the web site at http://www.biochemistry.ucr.edu/

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

POSTDOCTORAL POSITION LIPID/LIPOPROTEIN METABOLISM The University of Tennessee

Postdoctoral position available to study cellular and molecular mechanisms by which insulin regulates lipid synthesis in the liver. Position provides broad training in study of metabolic and molecular regulation of lipid and lipoprotein metabolism. Projects involve cloning of lipogenic enzyme(s) and study of signal transduction pathways that mediate effects of insulin on hepatic lipid and lipoprotein metabolism. Successful candidates should have demonstrated experience in standard molecular biology and cell biology techniques. Prior experience in study of signal transduction is desirable but not essential. Send curriculum vitae and names of three references to: Marshall Elam, Ph.D., M.D., Department of Pharmacology, University of Tennessee Health Sciences Center, 874 Union Avenue, Memphis, TN 38163. FAX: 901-448-7206. E-mail: melam@utmem.edu.

University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/Americans with Disabilities Act/Age Discrimination in Employment Act Employer.

TWO POSTDOCTORAL POSITIONS

We are currently seeking two postdoctoral fellows to work in the area of biomineralization and proteininterfacial interactions. Our laboratory is currently funded by the National Science Foundation and the Army Research Office, Department of Defense, One position is in the area of computational chemistry (algorithm design and programming experience in Fortran/C required), the other, nuclear magnetic resonance (biomolecular structure determination and/ or pulse sequence development experience required) Salaries are negotiable. Interested candidates should submit a copy of their curriculum vitae and have three letters of recommendation forwarded on their behalf to: Professor John S. Evans, Division of Basic Sciences, New York University, Room 1007, 345 East 24th Street, New York, NY 10010. E-mail: jse@lennon.nyu.edu. New York University is an Equal Opportunity Employer.

Three NIH- and Arthritis Foundation-funded POSTDOCTORAL POSITIONS available to study regulation of IL-4 production, detection of in vivo cytokine production, or antigen presentation by dendritic cells. Three years grant support assured. Candidates should have experience in immunology and/or molecular biology, speak English fluently, and be willing to come to Cincinnati for interview. Send curriculum vitae and references by e-mail to: Fred Finkelman, M.D., University of Cincinnati College of Medicine (e-mail: ffinkelman@mem.po.com). University of Cincinnati is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Postdoctoral positions available supported by the Hemostasis and Thrombosis Program for Academic Trainees and related projects at the University of Vermont. Research includes regulation and assembly of procoagulant complexes cells in thrombin generation and thrombosis epidemiology. Open to candidates with a Ph.D. or M.D. Send résumé and three letters of reference to: Dr. Kenneth G. Mann, Department of Biochemistry, College of Medicine, University of Vermont, Burlington, VT 05405. E-mail: kmann@protein.med.uvm.edu. Minority applicants and women are encouraged to apply.

POSTDOCTORAL POSITIONS MOLECULAR ENDOCRINOLOGY

Candidates who have expertise in molecular biology or reproductive endocrinology are sought to study steroid hormone receptor expression and function in the ovary at the molecular level. Please send your curriculum vitae and the names of three references to:

Dr. Ok-Kyong Park-Sarge Department of Physiology University of Kentucky Lexington, KY 40536-0084 E-mail: OKPS@pop.uky.edu

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Postdoctoral positions are available to study the translational control of early vertebrate development (Xenopus and mouse) and neuronal synaptic plasticity. One focus will be the molecular mechanisms by which sequence-specific, RNA-binding proteins regulate translation. In addition, the consequences of translational control on development and synaptic function will be assessed. Biochemistry and molecular biology, oocyte injection, generation of knockout mice, and cell culture are some of the methods that are employed. Recent salient references include Neuron 21:1129 (1998), EMBO J. 18:2294 (1999), and Molecular Cell (December, 1999). Further information can be found on the website: http://www. umassmed.edu/mgm/faculty/richter.cfm, or by e-mail: joel.richter@umassmed.edu. Send curriculum vitae and the names of three references to: Dr. Joel D. Richter, University of Massachusetts Medical School, Biotech 4, Room 330, 377 Plantation Street, Worcester, MA 01605.

POSTDOCTORAL POSITIONS are available immediately to study antigen processing and presentation, T cell repertoire, and autoimmunity. One position is to study self-tolerance and T cell repertoire directed against a model antigen. Another position is to investigate the pathogenesis of autoimmune arthritis using a rodent model. Applicants should have a Ph.D. and/or M.D. and experience in cellular immunology and/or molecular biology. Prior animal research experience is desired. Please send curriculum vitae and a brief description of previous research experience, and have three letters of recommendation sent to: Dr. Kamal D. Moudgil, M.D., Ph.D., Associate Professor, Department of Microbiology and Immunology, BRB 13-019, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201. FAX: 410-706-2129; é-mail: kmoud001@umaryland.edu>.

POSTDOCTORAL POSITIONS (Research Associate) available in Departments of Biochemistry (job #17268), Cell Biology and Anatomy (job #995305), Microbiology and Immunology (job #995303), Pharmacology/Toxicology (job #995301), and Physiology (job #995300) and Arizona Arthritis Center (job #995306) and Children's Research Center (job #995304). A Ph.D., M.D. or equivalent degree required. Positions available during 1999 and 2000. Review of applications begins on December 1, 1999, and will continue until filled. Send curriculum vitae and letter of interest referencing job number to appropriate department head, The University of Arizona, Arizona Health Sciences Center, Tucson, AZ 85724. Human Resources Website: http://hr2.hr.arizona.edu/. The University of Arizona is an Equal Employment Opportunity/ Affirmative Action Employer–Minorities/Women/Disabled/

POSTDOCTORAL POSITION available immediately to study molecular mimicry, autoimmunity, and infection utilizing animal models, transgenic mice, cellular and molecualr immunology. Candidate should have experience in cellular immunology, immunochemistry of molecular immunology. Send curriculum vitae to: Madeleine Cunningham, Ph.D., University of Oklahoma Health Sciences Center, Department of Microbiology and Immunology, 940 Stanton L. Young, #1053, Oklahoma City, OK 73104; e-mail: madeleine-cunningham@ouhsc.edu; FAX: 405-271-2217.

A POSTDOCTORAL POSITION is available in molecular evolution of viruses. Research goals are to develop and assess models of amino acid substitution accounting for rate heterogeneity across structure and functional site classes of retroviral proteins, and to apply them to questions of evolution and phylogeny. Preferred applicants will have strong statistical and computer skills. Contact (1) Richard Goldstein, Department of Chemistry, e-mail: richardg@umich. edu; or (2) David Mindell, Department of Biology, e-mail: mindell@umich.edu, University of Michigan, Ann Arbor, MI 48109.

POSITIONS OPEN

POSTDOCTORAL AND RESEARCH ASSISTANT POSITIONS

We have recently isolated several genes that are rapidly and transiently induced in the hippocampus and piriform cortex in response to depolarization. These genes encode synaptic vesicle components, protein kinases and transcription factors. We are interested in (i) the depolarization-induced signaling pathways and mechanisms of induction of these genes, (ii) their roles in modulating depolarizationinduced transmitter release and (iii) their roles in neuronal plasticity. We have also isolated several genes that are rapidly and preferentially induced in neurons by neurotrophins. We are interested in (i) the neurotrophin-induced signaling pathways and mechanisms of induction of these genes and (ii) their roles in neurotropin-driven neuronal differentiation. Because several students have recently received degrees, and several postdoctoral fellows have accepted permanent posts, positions are available in the laboratory. Training in molecular, cellular, and/or neurobiology is preferable. Please submit a curriculum vitae, three letters of reference, and a short description of your research experience to: Harvey R. Herschman, 341 Molecular Biology Institute, University of California, Los Angeles, 611 Charles E. Young Drive East, Los Angeles, CA 90095-1570.

POSTDOCTORAL POSITION NEURAL-GLIAL INTERACTIONS

For studies on opioid peptides and receptors in neural-glial and neural-immune cell interactions following stress and injury, in the laboratory of Dr. Brian Cox, Department of Pharmacology, Uniformed Services University, Bethesda, Maryland. A Ph.D. in a biomedical science, knowledge of molecular biology techniques, experience in immunocytochemistry, in situ hybridization and cell culture required; comprehensive benefits package offered. Send curriculum vitae and the names of three references to: Henry M. Jackson Foundation, 1401 Rockville Pike, Suite 600, Rockville, MD 20852, Attention HRD, #990514 or e-mail: hr@hjf.org. Equal Opportunity Employer/Affirmative Action.

POSTDOCTORAL FELLOWSHIP at The University of Texas Medical Branch at Galveston, Texas. The NIH asthma center has positions to dissect signaling pathways of novel genes in asthma using yeast two-hybrid, gene chip and other cutting-edge molecular techniques. Send curriculum vitae to: Drs. Alam (e-mail: ralam@utmb.edu) or Sur (e-mail: sasur@utmb.edu). Or mail to: Rafuel Alam, M.D., Ph.D. or Sanjiv Sur, M.D., Division Allergy, 301 University Boulevard, 409 Clinical Science Building, Galveston, TX 77555-0762. An Equal Opportunity/Affirmative Action Employer/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION BIOMATERIALS AND BIOMEMS

Available immediately. Candidates with experience in biomolecule-surface interactions, protein immobilization, biosensing, self-assembled thin films, molecular recognition, or IR spectroscopy of biomolecules are preferred. Please send curriculum vitae and contact information for three references to: **Dr. Miqin Zhang, Materials Science and Engineering, University of Washington, Box 352120, Seattle, WA 98195.**

Harvard JUNIOR FACULTY or SENIOR POSTDOCTORAL POSITION immediately available to study the molecular mechanism of fibrosis following immune injury. Experience and background in fibroblast biology is preferred. Training in immunology, cellular, and molecular biology is beneficial. Position suitable for individuals working on wound healing. Must demonstrate capability of working independently. Salary commensurate with experience and productivity. Send curriculum vitae, names and addresses of three referees to: Dr. A. Razzaque Ahmed, Department of Oral Medicine and Diagnostic Services, 188 Longwood Avenue, Boston, MA 02115 or FAX: 617-432-4436.

THE NEW YORK BOTANICAL GARDEN DIRECTOR PLANT MOLECULAR BIODIVERSITY STUDIES

As part of an expansion of its plant molecular systematics program (The Lewis B. and Dorothy Cullman Program for Molecular Systematics Studies), The New York Botanical Garden is soliciting applications from outstanding candidates for the directorship of a program in plant molecular biodiversity studies. As the leader of this new, enhanced research and training effort at the intersection of molecular and organismal biology, the appointee will also hold an endowed chair at the associate or full curatorial rank (equivalent to associate or full professor): The Lewis B. and Dorothy Cullman Curator of Plant Molecular Biodiversity Studies. It is further expected that the appointee will teach in at least one of The New York Botanical Garden's joint doctoral programs with Cornell University, Columbia University, the City University of New York, Yale University, or New York University and that s/he will actively seek peer-reviewed grants and contracts in support of research projects.

The successful candidate will possess a Ph.D. and will be fully conversant with modern genomic approaches as applied to plant systematics or economic botany. The specific disciplinary specialization is open, but the essential talent required will be the ability to creatively blend The New York Botanical Garden's unique biodiversity collections assets and deep expertise in plant and fungal diversity with the evolving genomics technologies. S/he will be a dynamic, collaboratively-minded individual with proven skills in interdisciplinary research team-building.

Applicants should send a curriculum vitae and statement of research interests, and the names and contact information for at least three references to George M. Milne, Jr., Ph.D., Chair, Molecular Biodiversity Studies Search Committee, Attention: Human Resources Department, The New York Botanical Garden, Bronx, NY 10458 USA. Position open until filled; review of applications to commence on January 1, 2000. The New York Botanical Garden is an affirmative action/equal opportunity employer.



LOCS HEALTH BESEARCH INSTITUTE

et the Ottown Maspital
INSTITUT LOCK DE RECHERCHE EN SANTÉ

MOLECULAR AND CELLULAR BIOLOGY Training Opportunities at the

Training Opportunities at the LOEB HEALTH RESEARCH INSTITUTE (www.lri.ca)

Positions for Postdoctoral fellows and Graduate students are currently available in many of the Institute's laboratories. The Loeb Health Research Institute is a basic

and clinical research facility of the Ottawa Hospital affiliated with the University of Ottawa, with over 75,000 square feet of laboratory space and over 11 million dollars in external research funding. Trainees are sought in each of the Institute's three molecular programs.

Diseases of Aging (basic mechanisms of disease in Alzheimer's, atherosclerosis, obesity, diabetes and AIDS).

M. Chrétien (Director), A. Bazak, M. Marcinkiewicz, M. Mbikay.

Hormones, Growth and Development (basic mechanisms of cellular and molecular signaling during development and in cancer, reproductive biology, diabetes and steroid hormone action).

R. Haché (Director), M.-A. Akimenko, J. Baltz, H. Davis, M. Ekker, Y. Lefebvre, J. Liu, J. Radziuk, A. Sorisky, H. Stern, N. Tanphaichitr, B. Tsang, K. Turksen, P. Walker, J. Watters.

Neuroscience (cellular and molecular mechanisms governing neurotransmission and signal transduction, response to trauma, and recovery of function in disease).

L. Renaud (Director), P. Doroshenko, B. Hu, Z. Kiss, H. Lesiuk, C. Morris, J. Ngsee, P. Stys, M. Tiberi.

Interested individuals should directly contact the individual Scientists listed at: The Loeb Health Research Institute, 725 Parkdale Ave, Ottawa, Ontario, Canada, K1Y 4K9.

For more information on individual research programs, please visit our website (www.lri.ca).

EUROPEAN OPPORTUNITIES

University College Dublin An Coláiste Ollscoile, Baile Átha Cliath.



The Conway Institute of Biomolecular and Biomedical Research

Conway Research Fellowships (Ref: 255/99)

Applications are invited for up to 15 posts of Postdoctoral Research Fellow (Conway Research Fellowships) at the Conway Institute of Biomolecular and Biomedical Research, a new multidisciplinary research institute being established on the main Belfield campus of University College Dublin with funding recently awarded from the Higher Education Authority's Programme for Research in Third Level Institutions 1999-2001. The Conway Institute will establish a critical mass of high quality investigators drawn from UCD's Faculties of Medicine, Veterinary Medicine, Science, Agriculture and Engineering within a dynamic, multidisciplinary, collaborative research environment that is underpinned by a state-ofthe-art research facility (~7000 M²), a core of high technology equipment and technical expertise, and new organisational and operational structures that transcend traditional faculty boundaries. The three interrelated research themes of the Conway Institute are (a) Advanced Biomolecular Synthesis, (b) Structure and Activity of Biomolecules, and (c) Molecular Medicine.

Conway Research Fellowships are initially for two years duration. Experience in enantioselective chemical synthesis, biotransformations and biocatalysis, biosystems modelling, molecular and cell biology, developmental biology, molecular immunology, detection of gene polymorphisms, vascular biology, neurobiology, molecular toxicology, or bioinformatics is desirable.

The closing date for applications is Friday December 3rd, 1999.

Applications (10 copies of cover letter and curriculum vitae) should be sent to the Personnel Office, University College Dublin, Belfield, Dublin 4, Ireland (quoting above reference number). Telephone enquires: (353–1–) 706 1653 and (353–1–) 706 1645 – Fax: (353–1–) 269 2472.

Email: acadrec@listserv.hea.ie

National University of Ireland, Dublin Ollscoile na hÉireann, Baile Átha Cliath.

POSTDOCTORAL POSITIONS McLaughlin Research Institute

1) To study the role of Casein Kinase II in spermatogenesis (*Nat. Genet.* 23, 118–121), including identification of the CK2 target protein and epistatic analysis with other candidate genes under **Dr. Xin Xu.** Previous experience in protein-protein interaction, kinase signaling, and knockout and transgenic mouse analysis would be helpful.

II) To study the role of Eyes Absent (Eya) genes during mammalian development and organogenesis under Dr. Pin-Xian Xu. Previous work established that Eyal gene is required for development of several organs. (Nat. Genet. 23, 113-117). Current efforts are focused on using Eya1-deficient mice to understand the developmental and molecular pathogenesis of organ defects that occur in Brancio-Oto-Renal syndrome, a human EYA1-deficiency. Molecular technologies are being used to dissect the genetic regulatory hierarchies that are required for auditory and other organ development. Candidates should have a strong molecular biology background. A good basic knowledge of embryology and mammalian genetics and experience in handling mice and mouse embryos is desirable.

To apply: please send a summary of prior research accomplishments and current research interests, a curriculum vitae, recent reprints/preprints, and names, telephone numbers, and e-mail addresses of three references to: Dr. Pin-Xian Xu, (Auditory System Development, pxu@po.mri.montana.edu) or Dr. Xin Xu, (Spermatogenesis, xxu@po.mri.montana.edu) McLaughlin Research Institute, 1520 23rd Street South, Great Falls, MT 59405. FAX: 406-454-6019. Website: www.montana.edu/wwwmri.

An Equal Opportunity Employer/Affirmative Action Employer.

Trudeau Institute has a **POSTDOCTORAL POSITION** available to investigate native and acquired mechanisms of resistance to pathogenic mycobacteria using established animal models of infection. Mechanisms of host resistance are being analyzed at the molecular, cellular, and physiological level, with a view to understanding obstacles to successful vaccination against tuberculosis. The position would be particularly suitable for a person trained in basic molecular techniques wishing to apply those techniques to analyzing animal models of infection. Persons trained in immunobiology are also encouraged to apply.

Trudeau Institute is a well-endowed, not-for-profit, basic biomedical research institute with an active faculty, and seminar and visiting scientist programs. Operating in modern facilities, with in-house animal production, and international reputation for excellence, it is located in an upstate New York resort community in the Adirondack Mountains, overlooking mountain vistas and a private beach on Saranac Lake. Competitive salary and fringe benefits are offered with possibility of on-site housing.

Please send a curriculum vitae, indicating three references and a letter describing research interests to individual faculty at:

Sheila Kent
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983
Telephone: 518-891-3080
FAX: 518-891-5126
E-mail: *skent@trudeauinstitute.org

Further information is available at website: www. trudeauinstitute.org or by written or telephone request.

POSTDOCTORAL POSITIONS available: RANTES transcription; granulysin killing; immuno-suppressive HLA peptides; T cells in tuberculosis. Molecular biology, cellular immunology, and/or animal model experience necessary. U.S. citizens or permanent residents. Send curriculum vitae and two references to: Alan M. Krensky, M.D. or Carol Clayberger, Ph.D., Department of Pediatrics, Stanford University, Stanford, CA 94305. E-mail: Krensky@stanford.edu or cclay@leland.stanford.edu.

POSITIONS OPEN



POSTDOCTORAL POSITIONS

Xencor is an exciting, well-financed, biotechnology company that uses breakthrough molecular design methods to develop biological macromolecules. The company consists of an excellent computational group and several biologists who have developed novel methods for improving the properties of commer-cially important proteins. We now seek individuals at the postdoctoral level with experience in either computational biology or molecular biology and biochemistry. Successful candidates will be highly motivated, able to work in a fast-paced environment and keenly interested in drug discovery and new drug discovery technologies. Experience in bioinformatics, software development, protein modeling, or cell biology is a plus. With an emphasis on teamwork, creativity and intellectual achievement (publishing and conference attendance are encouraged), Xencor is dedicated to providing a challenging and stimulating work environment, and a competitive salary and benefits package. Please submit your résumé by mail to: Xencor, 2585 Nina Street, Pasadena, CA 91107 or via e-mail: recruiting@xencor.com.

INTERDISCIPLINARY PROGRAM MUSCLE BIOLOGY University of Maryland, Baltimore

PRE- AND POSTDOCTORAL POSITIONS for training in biophysics, biochemistry, physiology, and cellular, developmental, and molecular biology of

skeletal, cardiac, and smooth muscle.

Postdoctoral applicants should e-mail their letter of interest, curriculum vitae, and list of references to e-mail: kreineck@umaryland.edu. Predoctoral candidates should request an application via e-mail. NIH-NIAMS-funded positions available for United States citizens and permanent residents only.

Further information is available at website: http://www.soml.umaryland.edu/muscle/home.html or contact Dr. Martin Schneider, 108 North Greene Street, Baltimore, MD 21201; e-mail: mschneid@umaryland.edu.

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

POSTDOCTORAL POSITION

A postdoctoral position is available to study the role of chemokines in the Langerhans Cell Histiocytoses and Hematophagocytic Lymphohistiocytosis syndromes. Studies will involve examination of patient material, molecular genetic analyses, and the use of rodent models. Candidates must have a Ph.D. or M.D. degree, documented skills in molecular biological techniques, the ability to work independently, and proficiency in written and spoken English. Interested applicants should submit a curriculum vitae and the names of three references to: Barrett J. Rollins, M.D., Ph.D., Department of Adult Oncology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. E-mail: barrett_rollins@ dfci.harvard.edu; FAX: 617-632-5998. Equal Opportunity Employer.

POSTDOCTORAL POSITION available in the Cardiovascular Institute and Department of Cell Biology and Physiology of the University of Pittsburgh. Projects involve studying the mechanism of arrhythmias and sudden death in transgenic and gene-targeted mice. Prior experience with electrophysiology of cardiac myocytes, molecular biology and/or optical mapping using voltage and calcium-sensitive dyes is required. Please send curriculum vitae and two references to: Barry London, M.D., Ph.D., Cardiovascular Institute, University of Pittsburgh Medical Center, BST 1744, 200 Lothrop Street, Pittsburgh, PA 15213-2582; Telephone: 412-383-8750; FAX: 412-383-8857; e-mail: londonb@msc.upmc.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION University of Michigan Department of Radiation Oncology

A postdoctoral position in the Division of Radiation and Cancer Biology is available immediately to develop a new category of radiosensitizing drugs which affect cell cycle checkpoints. The Division includes five laboratories, with areas under investigation relating to drug-radiation interactions, enzyme/prodrug gene therapy, radiation-induced and growth-factorregulated signal transduction, and triggering of p53 induction and apoptosis. The successful candidate will have a Ph.D. and a strong background in cell biology, molecular biology, or molecular pharmacology. Interested applicants should send their curriculum vitae and names of three references to: Theodore S. Lawrence, M.D., Ph.D., Professor and Chair, Department of Radiation Oncology, University of Michigan, 1500 East Medical Center Drive-UHB2C490, Ann Arbor, MI 48109-0010. Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS in cardiac cellular electrophysiology are available immediately to work on NIH-funded studies on the cellular basis of heart failure and arrhythmogenesis. This is a joint project between Dr. D. M. Bers in Physiology at Loyola University Chicago and Dr. S. M. Pogwizd in Medicine at University of Illinois, Chicago. Prior experience in patch clamp and/or fluorescence calcium measurements is highly desirable. Send letter, curriculum vitae, and names of three references to: Donald M. Bers, Ph.D., Chair, Department of Physiology, Loyola University Chicago, 2160 First Avenue, Maywood, IL 60153; e-mail: dbers@luc.edu. Loyola and University of Illinois, Chicago are Equal Opportunity/Affirmative Action Employers.

POSTDOCTORAL POSITION is available to study the repair of DNA damage caused by eukaryotic topoisomerase I. Using genetics and cell biology in yeast and other eukaryotes, we are investigating pathways dependent on an enzyme that specifically unlinks covalent topoI-DNA complexes (Science 286: 552). Send curriculum vitae and names of three references to: Dr. Howard A. Nash, Laboratory of Molecular Biology, Building 36, Room 1B08, NIMH, National Institutes of Health, Bethesda, MD 20892-4034. E-mail: nash@codon.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is available to study gene regulation and expression of mammalian cytochrome c oxidase. Desirable background consists of training and experience in molecular biology as well as some skills in protein chemistry and cell culture. Competitive salary commensurate with training and experience. To apply, send or FAX a curriculum vitae, a brief statement of research interests and experience, and names of three references to: Dr. Lawrence I. Grossman, Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. FAX: 313-577-5218; e-mail: l.grossman@wayne.edu. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP. To study at the National Institute for Occupational Safety and Health (NIOSH), Morgantown, West Virginia, USA (website: www.cdc.gov/niosh/homepage.html) under the auspices of a competitively-funded National Research Council Postdoctoral Associateship Program (website: www4.nationalacademies.org/osep/ rap.nsf). The project will involve study of the role of the respiratory epithelium in the development of airway hyperreactivity in asthma using electrophysiological and molecular biological techniques. A Ph.D. and/or M.D. and prior research experience are required. Applicants should submit a curriculum vitae and the names of three references to: Jeffrey S. Fedan, M/S 2015, NIOSH, 1095 Willowdale Road, Morgantown, WV 26505 (FAX: 304-285-5938; E-mail: jsf2@cdc.gov). NIOSH is an Equal Opportunity Employer and provides a smoke-free environment.



School of Biological Sciences Five Academic Appointments

The School of Biological Sciences (rated 4 in RAE 96; grant income 1998 >£5.5m) was formed in 1996 through the merger of all of the biology departments at Liverpool. The School, now the largest department in The University, comprises 69 academic staff covering the full range of the biological subdisciplines in a single research and teaching organisation. It offers 12 Honours degrees to over 900 undergraduates, 5 MSc courses and has over 190 postgraduate research students. See http://www.liv.ac.uk/biosciences for further details. A programme will commence shortly to accommodate the School in a new Biosciences Centre. It is planned that the Centre will provide state-of-the-art laboratories, a range of core facilities, a small business incubator, and a 'Research Hotel'. The Centre will serve as the focus for the Liverpool life sciences community which, with over 450 academic staff and an annual research income of £15m, is one of the major UK bioscience campuses. In this first phase of the strategy to develop the biosciences at Liverpool, The University wishes to appoint exceptional candidates to a range of positions in the School of Biological Sciences. An ability to work within a strong interdisciplinary environment is an advantage since exciting research developments are underway within the Science Faculty (with Chemistry, Physics, Computer Sciences) and with the Faculties of Medicine and Veterinary Sciences. Applications are invited for the following posts within the School.

The salaries for the professorial appointments will be negotiable, and the salaries for all of the Lectureships will be within the range £17,238 - £30,065 pa

Professorial Appointment in Biochemistry/Molecular Biologist

Applications are invited for the prestigious Johnston Chair of Biochemistry, which is the oldest Chair of Biochemistry in the UK. We are seeking an outstanding individual with a strong research profile and international reputation in any area of biochemistry or molecular biology, although applications from those in the broad area of cell signalling are particularly encouraged. Proven ability to fund and to direct a dynamic research programme is essential. The successful candidate will provide strong research leadership within the School and will participate in an undergraduate teaching programme that reflects the current exciting developments in the biosciences.

Quote Ref: B/234/S Closing Date: 7 January 2000

Up to Professorial Appointment in Zoology/Animal Sciences

We wish to fill the recently vacated Chair in Zoology with an appointment in animal science, which can be at any level up to and including Chair. Candidates should have an outstanding research reputation, though more junior candidates showing exceptional promise will also be considered. Whilst no fields are excluded from consideration, preference may be given to those using advanced molecular, transgenic or genomic approaches to areas such as neuroscience, developmental or reproductive biology and stress physiology. The successful candidate will also participate in our undergraduate teaching programmes in Zoology and Animal Sciences with the Veterinary Faculty.

Quote Ref: B/236/S Closing Date: 7 January 2000

Lectureship

The appointment is permanent and may be made in any area that strengthens our current research and teaching activities, with an emphasis on interdisciplinary approaches. Preference may be given to candidates applying molecular techniques to the genetic analysis of populations or to ecological problems, although high quality applications from any field will be considered. **Quote Ref: B/237/S**

Lectureship in Evolutionary Psychology

We are seeking applicants for this post within the broad area of evolutionary psychology and behavioural ecology. The appointee will be expected to initiate a research programme in this area, as well as supporting teaching in the School's MSc in Evolutionary Psychology and undergraduate programmes. The post is tenable for three years in the first instance. Quote Ref: B/238/S

Lectureship in Bioinformatics Joint Appointment with the Department of Computer Science

This post is intended to underpin a range of research and teaching initiatives in the area of Bioinformatics. The successful applicant will be expected to instigate an independent research programme that will act as a focus for joint research opportunities between the School of Biological Sciences and the Department of Computer Science. In addition, the appointee will play a major role in the design and implementation of a new MSc course in Biosystems and Informatics. The post is tenable for three years in the first instance. **Quote Ref: B/239/S**

Closing date for all of the Lectureship posts: 10 December 1999

Young Research Group Leaders in any area of Biology

The new Biosciences Centre will provide exciting opportunities for young research group leaders who wish to establish themselves at Liverpool. They will have the opportunity to occupy new state-of-the-art laboratory suites at the heart of a vigorous research community, close to a range of excellent advanced technologies/core facilities. In the first instance, qualified researchers will possess either their own fellowships or will apply for fellowships from an appropriate funding body. Those interested should contact Professor Julian Crampton (see below).

Informal enquiries for all the above posts may be made to the Dean of the Faculty of Science, Professor Tony Harris on 0151 794 3563, email: sr45@liv.ac.uk or to the Head of the School of Biological Sciences, Professor Julian Crampton on 0151 794 4477, email: jmc@liv.ac.uk

Further particulars and details of the application procedure may be requested from the Director of Personnel, Thé University of Liverpool, Liverpool L69 3BX on 0151 794 2210 (24 hr answerphone) or via email: jobs@liv.ac.uk Web site at http://www.liv.ac.uk

COMMITTED TO EQUAL OPPORTUNITIES

POSTDOCTORAL POSITION STRUCTURAL AND MECHANISTIC STUDIES OF tRNA MODIFICATIONS

A postdoctoral position is available January 2000 to study the mechanisms of tRNA modifications at the University of Illinois at Urbana-Champaign. The candidate will be responsible for the synthesis of modified tRNA substrates in order to trap tRNA/enzyme complex for structural studies. Previous experience in organic synthesis is preferred. Ph.D. in chemistry, biochemistry, or biophysics is required. Two-years appointment with possibility of extension. Please send a cover letter, curriculum vitae, and three letters of reference to: Dr. Huifang Huang, Department of Biochemistry, University of Illinois at Urbana-Champaign, 411 Roger Adams Laboratory, 600 South Mathews Avenue, Urbana, IL 61801. Email: huang@uiuc.edu. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW POSITION available immediately to study human immune response to human papillomavirus (HPV). Emphasis will be placed on examining the local cellular immune response against this common sexually transmitted disease. Candidates with a M.D., Ph.D. with experience in cellular immunology, and/or virology are preferred. Salary is competitive. Send curriculum vitae, a statement of research goals, and names of three references to: Dr. Michael Hagensee, Department of Medicine, Section of Infectious Disease, Louisiana State University Health Science Center, 1542 Tulane Avenue, New Orleans, LA. E-mail: mhagen@lsumc.edu. Louisiana State University Health Science Center is an Equal Opportunity Employer.

GLOBAL OPPORTUNITIES

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY Head of Department of Biology

The University was opened in October 1991 with current enrollment at about 7000 (FTE) students. The School of Science, which enrolls about 23 percent of the University's students, comprises five departments: Biochemisry, Biology, Chemistry, Mathematics, and Physics. The Department of Biology conducts comprehensive teaching and research programs in both the basic and applied aspects of biology. The academic degrees offered by the Department are: B.Sc., M.Sc., M.Phil., and Ph.D. Major foci of the Department's research include cellular and developmental biology, cancer biology, neurobiology, plant biology and marine-environment biology. Currently, there are 21 regular and several visiting faculty members in the Department, teaching about 260 undergraduate students and 60 graduate students. A number of central service facilities and interdisciplinary research institutes/centers provide support for the Department's research programs; of particular relevance are the Animal Care Facility and Plant Growth Facility, together with the Biotechnology Research Institute, Center for Coastal and Atmospheric Research, and Molecular Neuroscience Center. For more information, please visit the School/Department websites: http://www.ust.hk/.

Applications/nominations are invited from wellqualified and accomplished scholars for the position. In addition to extensive teaching and research experience, the successful candidate must have demonstrable leadership qualities necessary to lead and manage the Department. Salary will be highly competitive with generous benefits. Applications/nominations together with a detailed curriculum vitae and the names and addresses/FAX numbers/e-mail addresses of three to five referees should be sent to: Chair, Search Committee for Headship of Department of Biology, c/o School of Science, The Hong Kong University of Science and Technology, Clearwater Bay, Kowloon, Hong Kong (FAX: 852-2358-1464, e-mail: DHSEARCH@UST.HK) before 29 February 2000. The search will continue until a suitable appointment is made.

POSITIONS OPEN

POSTDOCTORAL POSITIONS immediately available to investigate mitogen-mediated signal transduction. Studies focus on the biological activity of BMK1/ERK5 MAP kinase in growth factors-mediated cell cycle progression and cell migration (e.g., see: EMBO J. 16:7054, 1997, Nature 395:713, 1998). Expertise in molecular biology, cellular biology, or protein chemistry would be helpful. Please send curriculum vitae and three reference names to: Jiing-Dwan Lee, Ph.D., IMM-12, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. E-mail: jdlee@scripps.edu. The Scripps Research Institute is an Equal Opportunity/Affirmative Action Employer.

MEETINGS

The ninth meeting of the International Study Group on the Pharmacology of Memory Disorders Associated with Aging ("Zurich IX") will be held in Zurich, Switzerland February 18–20, 2000, at the Zurich Marriott Hotel. Topics in the program include: α -Synoclein in Neurodegenerative Disease, Frontotemporal Dementia Related to Tau, Transgenic and Knockout Approaches to Neurodegenerative Disease, Proteases in Alzheimer's Disease, and Therapies for AD Beyond AChE Inhibitors. In addition, there is a poster session with platform summary presentations.

Individuals who wish to participate in this meeting should contact Dr. John H. Growdon, WACC 830, Massachusetts General Hospital, Boston, MA 02114, USA (Telephone: 617-726-1728; FAX: 617-726-4101; e-mail: growdon@helix.mgh. harvard.edu) or Dr. Roger Nitsch, Department of Psychiatry Research, August Forel Strasse 1, University of Zurich, 8008 Zurich Switzerland (Telephone: 41-1-634-8871; FAX: 41-1-634-8876; e-mail: nitsch@bli.unizh.ch). The U.S. \$250 meeting registration fee includes a welcome reception, two lunches, coffee breaks, and the abstract book.

The poster session participants and topics have not been assigned; interested investigators should submit their abstracts to **Dr. Growdon** or to **Dr. Nitsch** by December 15, 1999. We will confirm abstract acceptance by January 15, 2000. Young investigators are encouraged to participate in the meeting. To help defray the costs of their attendance, we have established five traveling-fellowships; each award will be for U.S. \$1000. Women and minority scientists are especially encouraged to apply to **Dr. Growdon** for these fellowships by January 1, 2000.

GLOBAL OPPORTUNITIES

The American University in Cairo is seeking a FULL-TIME FACULTY member with a Ph.D. in organic chemistry to teach in its Science Department. The successful candidate will be expected to teach organic and general chemistry, including laboratories, to undergraduate students. This two-year appointment begins September 2000. Renewal of the appointment depends upon institutional needs and/or the appointee's performance. The normal teaching load is three courses per semester. Salary and rank given according to a scale based on qualifications and professional experience. For expatriates, housing, annual round-trip air travel for appointee and accompanying family, plus schooling for up to two children are included. In view of American University in Cairo's protocol agreement with the Egyptian Government which requires specific proportions of Egyptian, U.S., and third-country citizen faculty, at this time preference will be given to qualified applicants who are U.S. citizens. Mail letter of application specifying Job Number CHEM-1, a current curriculum vitae and the names and addresses of three references who are familiar with both the candidate's research and teaching to: Dr. Earl (Tim) Sullivan, Provost, The American University in Cairo, 420 Fifth Avenue, Floor 3, New York, NY 10018-2729, before December 15th, 1999. Please visit our website: www. aucegypt.edu. American University in Cairo is an Equal Opportunity Employer.

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POSTTOCTORAL POSITION immediately available for a NIH-funded multidisciplinary study of the pathogenesis of AIDS focused on the intestinal immune system. Current work utilizes the SIV/macaque model and is directed at determining how SIV/HIV targets and disrupts the intestinal immune system and alters intestinal structure and function. Candidates should have a M.D., D.V.M. or Ph.D. and experience with flow cytometry and mucosal immunology. Please send curriculum vitae, cover letter indicating your research interests and experience, and names of three references to: Dr. Andrew A. Lackner, NERPRC-Harvard Medical School, One Pine Hill Drive, P.O. Box 9102, Southborough, MA 01772-9102. E-mail: Alackner@hms.harvard.edu.

ANNOUNCEMENTS

NOMINATIONS FOR SALMON RECOVERY SCIENCE REVIEW PANEL

The National Marine Fisheries Service is soliciting nominations for a Recovery Science Review Panel to guide scientific and technical aspects of recovery planning for over 20 evolutionarily significant units of Pacific salmon and steelhead that have been federally listed as threatened or endangered species. The Panel will consist of three to five highly qualified scientists, who should have a distinguished record in the fields of ecology, evolutionary biology, conservation biology, fisheries biology, or salmon biology; have held positions of scientific leadership; have demonstrated fairness and cooperation throughout their careers; and meet National Research Council standards for independence and conflict of interest. For more details, access the Federal Register notice announcing the Panel, and a document describing the recovery planning process for West Coast salmonids, at website: www.nwr.noaa.gov. E-mail questions to Beth. Sanderson@noaa.gov. Nominations must be received by December 3, 1999, at:

ATTN: Salmonid Recovery Panel Office of Science and Technology National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910

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GRANTS

Applications sought for *in vitro* screening of vaginal

The Contraceptive Research and Development (CONRAD) Program is seeking applications to evaluate the *in vitro* anti-HIV activity of approximately 180 agents per year supplied by CONRAD. Methods should follow or improve upon an existing CONRAD screening algorithm. Application deadline is January 14, 2000. For information, contact: Lee E. Claypool, Ph.D., CONRAD Program, 1611 North Kent Street, Suite 806, Arlington, VA 22209. Telephone: 703-276-3901; FAX: 703-524-4770; e-mail: lclaypool@conrad.org.

NIH-funded positions of RESEARCH ASSOCI-ATE and POSTDOCTORAL RESEARCH TRAIN-EE are available to participate in several multidisciplinary research projects involved in mapping and characterization of susceptibility genes for nicotine dependence and other mental disorders in humans. Experience in molecular biology, genome mapping, linkage, and association analysis would be advantageous, but other highly motivated individuals are encouraged to apply. Requirements: For postdoctoral fellow, a Ph.D. in molecular biology, statistical genetics, or related fields is desired; for research associate, Ph.D. with three or more years of research experience in statistical genetics, molecular biology, or related fields is desired. Send curriculum vitae and the names of three references to: Dr. Ming Li, Department of Pharmacology, The University of Tennessee, 874 Union Avenue, Memphis, TN 38163; e-mail: mdli@utmem.edu or FAX: 901-448-7206.

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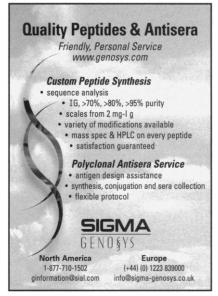
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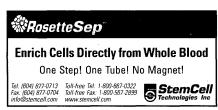
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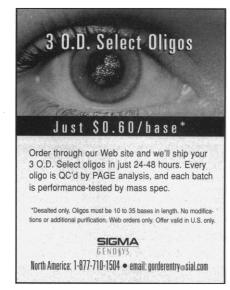
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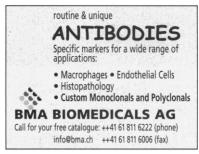
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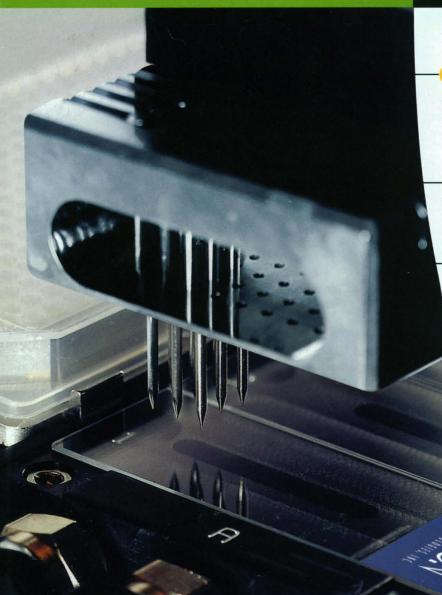
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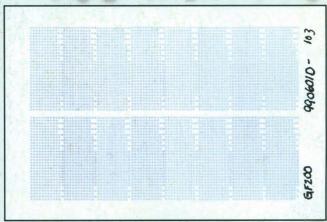
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1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. (1996) Genomics 33, 151-152.

2. http://www.ncbi.nlm.nih.gov/UniGene/index.html

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