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Estimates: Science will provide a cost estimate for line ads. This is an approximate cost only. Purchase orders must allow for variation between estimated lines and actual typeset lines and resulting final cost.

For line advertising deadlines, call Troy Benitez, Telephone: (202) 326-6740; or Kristin Westapher, Telephone: (202) 326-6555;FAX: (202) 289-6742. E-mail: science_classifieds@aaas.org

Credit Cards: Science accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

Cancellations: Deadline for cancellation is Tuesday, 10 days prior to issue date. Discounts: A 3% cash discount is granted to all prepaid ads.

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Debbie Cummings. Telephone: +44(0) 1223 326 500; FAX: +44(0) 1223 326 532.

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Science reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

FACULTY POSITIONS UNIVERSITY OF ARKANSAS AT LITTLE ROCK

The Department of Biology anticipates the opening of two (2) tenure-track **ASSISTANT PROFESSOR** positions and one (1) non-tenure-track **INSTRUCTOR** position (annually renewable contract).

The University of Arkansas at Little Rock (website: www.ualr.edu) is a metropolitan, state-supported university with a current enrollment of approximately 11,000 students. Within the College of Science and Engineering Technology, the Department of Biology consists of 21 full-time faculty members and over 350 majors in its various degree programs. The department offers B.S. degrees in biology with three concentrations (general biology, fisheries and wildlife management, and molecular biotechnology), environmental health sciences (four options), and health education (two options).

The application procedure for each of these positions is to submit a curriculum vitae, statement of teaching philosophy, undergraduate and graduate transcripts, and at least four letters of reference. Review of the applications will begin January 4, 1999, and will continue until the positions are filled.

Human anatomy and physiology Coordinator/Instructor (non-tenure-track, yearly renewable contract): Applicants must have a minimum of a M.S. or M.A. in some area of the biological sciences. This person will teach and serve as the coordinator for our freshman-level human anatomy and physiology courses and will also teach one of the introductory courses within the department

one of the introductory courses within the department (viz., science of biology or environmental biology). Applications should be addressed to: Dr. Leland F. Morgans, Chair, Department of Biology, University of Arkansas at Little Rock, Fribourgh Hall, Room 406, 2801 South University Avenue, Little Rock, AR

72204-1099.

Botanist. Tenure-track Assistant Professor: Applicants must have a Ph.D. in botany or related disciplines. We are especially interested in candidates having expertise in either systematics/ecology or physiology/developmental areas. The successful candidate is expected to teach undergraduate courses and to develop a research program involving undergraduate students. Applications should be addressed to: Dr. James H. Peck, Chair of Botany Search Committee, Department of Biology, University of Arkansas at Little Rock, Fribourgh Hall, Room 406, 2801 South University Avenue, Little Rock, AR 72204-1099.

Population Biologist. Tenure-track Assistant Professor. Applicants must have a Ph.D. in an appropriate discipline. We are especially interested in candidates having expertise in laboratory and field techniques, to include modern molecular approaches and/or the use of remote sensing technology. The successful candidate is to participate in service courses at the freshman/sophomore level and upper-level graduate courses in their discipline that integrate with departmental programs in fisheries and wildlife (to include a course in population biology) and cell molecular biology. The individual selected for the position will be expected to develop an active research program to include the training of both undergraduate and graduate students. Applications should be addressed to: Dr. Gary Heidt, Chair of Population Biology Search Committee, Department of Biology, University of Arkansas at Little Rock, Fribourgh Hall, Room 406, 2801 South University Avenue, Little Rock, AR 72204-1099. Email: gaheidt@ualr.edu.

The University of Arkansas at Little Rock is an Equal Opportunity/Affirmative Action Employer and actively seeks the candidacy of minorities, women, Vietuam-era veterans, and persons with disability. Under Arkansas law, all applications are subject to disclosure. Persons hired must have proof of legal authority to work in the United States.

MEDICAL WRITERS

Leading New York City medical education/communications company has an intermediate opening for Medical Writers. Familiarity with development of biological/biomedical sciences manuscripts essential. Ph.D. or advanced degree in the biological sciences preferred. The ability to write clearly and concisely is essential. The candidate will be expected to work on his/her own initiative, interface with Physicians, clients, and Program Directors. Some travel may be required. Please send résumé to: Human Resources Department, Health Science Communications, Inc., 12th Floor, 16 West 22nd Street, New York, NY 10010.

POSITIONS OPEN

STATISTICS/MOLECULAR GENETICS IOWA STATE UNIVERSITY

Applications are invited for a TENURE-TRACK/TENURED FACULTY POSITION in statistical genetics/computational molecular biology. This is a joint appointment in the Department of Statistics and the Department of Zoology and Genetics. We are seeking a person to conduct a nationally competitive research program on statistical approaches to areas such as bioinformatics, genomics, functional and post-genomic analyses, molecular evolution, protein structure/function prediction, population genetics.

The Department of Statistics offers a outstanding research environment for the development of statistical methodology and has a rich history of collaborative research with the biological sciences. The Department of Zoology and Genetics includes active research groups in bioinformatics, genetics, molecular evolution, neurobiology, developmental biology, and integrative biology, and participates in a variety of exciting interdisciplinary research programs.

The position includes excellent space, access to substantial computational facilities, discipline competitive salary, and generous start-up funds. Applicants should have a Ph.D. in statistics or biostatistics, or a Ph.D. in a related field in the life or computational sciences. The modest teaching load includes the opportunity to offer a graduate-level course on statistical methods for molecular genetics. For more information, select the "New Faculty Positions" icon at website: http://www.public.iastate.edu/~stat.

Applications should include a cover letter describing current and planned research and teaching interests, a curriculum vitae, selected reprints, and three letters of recommendation. Recent graduates should also supply graduate transcripts. All materials should be submitted by January 15, 1999, to: Dr. Kenneth J. Koehler, Search Committee Chair, 120 Snedecor Hall, Iowa State University, Ames, IA 50011-1210. *Iowa State University is an Equal Opportunity/Affirmative Action Employer.*

TWO FACULTY POSITIONS AVAILABLE

The Department of Biochemistry and Molecular Biology and the Institute for Genetic Medicine (IGM) at the University of Southern California (USC) School of Medicine in Los Angeles, California, has openings for two exceptional new Investigators at the ASSISTANT PRO-FESSOR level (tenure-track). Candidates should have a Ph.D. or M.D. degree with at least two years of postdoctoral experience and an exceptional publication record. We are seeking individuals who apply modern molecular techniques to the investigation of fundamental problems in the biomedical sciences. We wish to complement the IGM's existing faculty who have research interests in genetics and molecular genetics of cancer, cellular differentiation, mammalian development, and gene therapy. The appointment includes competitive salaries and generous start-up packages funded in part by a grant from the Howard Hughes Medical Institute and new research space in the dynamic and newly remodeled state-of-theart interactive IGM Collaboratories. Candidates should forward their curriculum vitae, three letters of recommendation, two or three representative research publications, and a brief statement of future research plans to: Dr. Laurence Kedes, Director, Institute for Genetic Medicine, University of Southern California School of Medicine, 2050 Alcazar Street, Los Angeles, CA 90033. The University of Southern California is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION ANIMAL VIROLOGY COLUMBIA UNIVERSITY

The Department of Microbiology of the College of Physicians and Surgeons of Columbia University is recruiting for a position of FULL PROFESSOR at the tenured level in the field of animal virology. Applicants must have a Ph.D. or M.D., a demonstrated track record of funding, and a research program that encompasses more than one area of focus. The successful applicant will be expected to teach courses for Ph.D. and M.D. candidates, as well as pursue a program of excellence in research. Send curriculum vitae and four letters of recomendation to: Dr. Saul J. Silverstein, College of Physicians and Surgeons of Columbia University, Department of Microbiology, 701 West 168th Street, Room 1310, New York, NY 10032. Columbia University is an Equal Opportunity/Affinnative Action Employer.

PHARMACOKINETICIST

Human Genome Sciences, Inc. is a company with the mission to develop products to predict, prevent, detect, treat, and cure disease based on technology derived from its leadership position in the discovery and understanding of human, microbial, and plant genes. We currently have a position available in the following area:

PHARMACOKINETICIST

Scientist position in the Department of Pharmacology with dual responsibilities for both preclinical and clinical pharmacokinetics. Individual will support the development of recombinant proteins by designing, conducting, and analyzing data from pharmacokinetic studies including development at early preclinical and the more advanced clinical stages. Qualified candidate will have a Ph.D. in pharmacokinetics with 2+ yrs industry experience. Demonstrated expertise in the analysis and integration of preclinical and clinical pharmacokinetic data is required. Experience with therapeutic proteins is preferred. Job Code # DR 11/27

HGS encourages the pursuit of professional excellence and offers a competitive benefits package, including educational reimbursement, subsidized health club membership, and a 401(k) with employer match. Look for us on the Internet at www.hgsi.com for additional information. For immediate

consideration, please send/fax your resume to Human Resources Department, Human Genome Sciences, Inc., Job Code #, 9410 Key West Avenue, Rockville, MD 20850; FAX: (301) 309-1845.

Our preferred method for receiving resumes is via our Web page or via e-mail. EOE, M/F/D/V.

Visit our Web site to learn more about us: http://www.hgsi.com

SEARLE

At Searle we share a common goal - to help people lead longer, healthier lives. We are part of Monsanto's pioneering vision to use 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.

To achieve this goal, we are selectively hiring the best and the brightest people in the world. People who can make a difference and want to leave their mark. Can you see yourself working on our dream of helping to improve food and health throughout the world? Do you ever think about what you can achieve and the difference you, personally, can make? All of us at Searle ask these questions daily. It's what brought us together and keeps us together.

Imagine the possibilities - a hetter world, healthier families, a more enjoyable life. We are a team with a dream, and we would like you to be a part of it.

RESEARCH SCIENTIST -THROMBOSIS/VASCULAR BIOLOGY

In this position you will provide leadership and input into a strong team oriented research effort in thrombosis, coagulation or vascular biology. You will propose and initiate new therapeutic targets for the treatment of cardiovascular thrombotic diseases. In addition, you will serve as a formal leader for drug discovery project teams in a matrix environment.

We require 2-5 years of research experience in drug discovery, preferably in a pharmaceutical and/or biotech industry, as well as a background in biochemistry or molecular biology or genomics, with an in depth knowledge of platelet signaling mechanisms, integrin receptors, endothelial cell biology or vascular inflammation. A PhD or equivalent experience with previous supervision experience is preferred.

For consideration, please submit your resume to: Monsanto Life Sciences Company, c/o Searle, 4901 Searle Parkway, Skokie, IL 60077. Fax: 847/982-4637. Please visit our website at ww.monsanto.com. EEO/AA Employer M/F/D/V.

ADVISORY: As a consequence of the discontinued merger between Monsanto and AHP. Monsanto cannot solicit, recruit, hire, or offer or agree to hire any employee of AHP or its subsidiaries until July 13, 1999. If you fall within that group, please DO NOT send inquiries at this time.



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U.S. Environmental Protection Agency Office of Research and Development

EPA is seeking a highly qualified scientific leader for the position of Division Director, Human Studies, National Health and Environmental Effects Research Laboratory. The division is housed in the EPA Human Studies Facility on the campus of the University of North Carolina, Chapel Hill, NC. This division provides critical human data and mechanistic information needed to improve the scientific basis for health risk assessment to better support environmental decision making by the Agency. The successful candidate will plan, develop, organize, direct, and implement multimillion dollar research programs.

This division conducts a multidisciplinary research and development program in the broad area of human health effects of environmental pollutants. Areas of specialization include:

- development of methods and conduct of studies to identify and quantify the effects of environmental pollutants on humans.
- development/application of approaches to estimate directly human exposure and dose or through the application of validated biomarkers.
- conduct of mechanistic research (in vivo and in vitro) for the development of pharmacokinetic and biologically based dose response models.

To meet the requirements of this position, applicants must have a Bachelor's (or higher) degree in one of the following: biological, medical, engineering, or physical sciences (advanced degree preferred, but not required). Preferred candidate would possess recognized scientific expertise as evidenced by multiple publications in peer-reviewed literature and invitations to participate in national and international meetings/panels. Candidates must also have competence and substantive specialized (scientific, administrative, or managerial) experience in a type of work or a combination of functions directly related to this position. In addition, applicants must meet the executive and technical qualifications described in the vacancy announcement. Salary will be commensurate with level of appointment in the federal Senior Executive Service. To obtain a copy of the vacancy announcement for this position, call or write to: USEPA/OARM/OHROS/SES Human Resources Staff (3641), 401 M Street S.W., Washington, DC 20460. The telephone number is 202-260-6374. Request announcement number EPA-9-SES-ORD-6136 or you may download a full text announcement via Internet at www.usajobs.opm.gov. Applications must be postmarked by the closing date January 15, 1999.

EPA is an Equal Opportunity Employer.

science serving society

HYDROLOGIST

Work as senior-level surface water hydrologist in the Environmental Science Group. Provide leadership for programs on land-surface environmental processes (from the top of plant canopy through rooting zone). Focus on applying research findings to contaminant transport, human/ecological risk assessment, environmental restoration (e.g., landfill covers), ecological/hydrological/soils interrelationships in semiarid settings, and regional-scale/high-resolution assessments of water resources.

REQUIRED SKILLS: Proven experience with surface water hydrology, track record of program development, experience on multidisciplinary research/technical teams, strong leadership/verbal/ written communication skills, and membership in professional communities/societies (including AWRA and AGU).

DESIRED SKILLS: Experience in proposal preparation, research/ project management, collaborative interactions, and mentorship with junior colleagues. Familiarity with DoE, DoD, DoI, Lab academic,

EDUCATION: Ph.D. in the area of surface water hydrology or equivalent combination of education and relevant experience.

Ability to obtain a DOE Q-clearance, which normally requires U.S. citizenship, is required. Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements for access to classified matter,

For consideration, please send your resume referencing "SCIENCE 994212" to jobs@lanl.gov (no attachments, please)

or mail to: Human Resources Division, Los Alamos National Laboratory, "SCIENCE 994212," Mail Stop P286, Los Alamos, New Mexico 87545.

.os Alamos NATIONAL LABORATORY

www.lanl.gov

EOE

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NATIONAL CANCER INSTITUTE National Institutes of Health ROCKVILLE, MARYLAND



DIRECTOR, DIVISION OF CANCER BIOLOGY

The National Cancer Institute (NCI), the nation's leading organization responsible for cancer research, seeks a highly motivated individual to fill a senior scientist or science administrator position as the Director, Division of Cancer Biology (DCB). The incumbent will provide visionary leadership and must demonstrate a commitment to the NCI's program goals, priorities, and initiatives.

The Director of the DCB is responsible for formulating with the Director, NCI the major policies of the National Cancer Program in cancer biology and cancer immunology including planning, directing, coordinating, and evaluating a contract and grant-sponsored program of extramural basic and applied research. Included in this research is the study of biological and health effects of exposures to ionizing and non-ionizing radiation and the role of chemical and physical agents, acting separately or together, or in combination with biological agents in the inhibition or promotion of cancer. Additionally, the Director of DCB is responsible for establishing program priorities, allocating resources, integrating the projects of the various branches, evaluating program effectiveness, and representing the program area in management and scientific decision-making meetings with the Institute; as well as advising the Institute Director and other Institute staff on extramural research in cancer biology and associated areas of science of interest to the Institute.

The Director manages a budget of approximately \$550 million, four major programmatic areas (seven branches) and oversees a staff of approximately 62. These programs are implemented through extramural grants, contracts, cooperative agreements, collaborative projects, and other activities. The Director serves as a member of the NCI Executive Committee and directs and provides leadership to the senior professional staff. Through presentations and personal interactions, the incumbent advises the NCI Board of Scientific Advisors, National Cancer Advisory Board, and the President's Cancer Panel of advances and changes within the overall program.

The qualified candidate must be an experienced Senior Scientist and/or Science Administrator with considerable experience and demonstrated recognition for achievements related to cancer biology research. The candidate must have extensive scientific expertise in the field of chemistry, biology, microbiology, or medicine; must be nationally recognized by the scientific community as an authority in basic cancer research, scientific administration, and financial management of a multimillion-dollar research program; and must have professional experience that has demonstrated successful program planning, implementation, development, and scientific administration of biomedical research programs. In addition to the duties outlined above, opportunities for continued personal direct participation in research may be provided through continued external collaborative efforts or by affiliation with an intramural unit of the NIH.

SALARY/BENEFITS

Senior Executive Service Appointments — ES-1 to ES-6 (Currently \$106,412 to \$125,900 including locality pay). A one-time lump-sum recruitment bonus of up to 25% of basic salary may be paid subject to approval. In addition, a Physician Comparability Allowance of up to \$20,000 may be paid if applicable. Total compensation, however, may not exceed the maximum payable amount of \$151,800.

Other Appointment Mechanisms and Incentives — May apply in individual circumstances based on experience and expertise with total salary and incentive compensation to be negotiated.

Benefits — Health and life insurance options, retirement, savings plans, paid holidays, and vacation and sick leave.

Applications will be accepted from all qualified persons, including PHS Commissioned Corps Officers and individuals with SES reinstatement eligibility. The individual selected, if not presently in the SES, must serve a one-year probationary period.

Applicants must meet the qualifications requirements. Applicants will be further evaluated on the degree to which they possess these requirements. A copy of the requirements may be obtained by contacting Ms. Toni McKeown in the Human Resources Management and Consulting Branch, NCI, at (301) 402-2812. Applicants are strongly encouraged to obtain this information. A current curriculum vitae and bibliography must accompany all applications/résumés. Applications/résumés are to be postmarked to Ms. McKeown by January 22, 1999, at:

National Cancer Institute (vacancy announcement CA-98-2151)
Human Resources Management and Consulting Branch
6120 Executive Boulevard
EPS/Room 550, MSC-7211
Bethesda, MD 20892-7211

All applicants will be given consideration without regard to race, color, gender, national origin, age, religion, disability, or sexual orientation.

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YOUR SELF-DISCOVER

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, offers challenging opportunities in a scientific environment in Ann Arbor, Michigan as a:

Senior Scientist Research Associate

You will conduct and supervise in vitro drug metabolism related experiments to support drug discovery. Key responsibilities include conducting experiments to determine metabolic stability, metabolite identification, cross-species comparisons, drug-drug interactions, and CYP2D6 polymorphic drug metabolism potential. Activities also include interfacing with drug discovery teams to assist in drug metabolism related issues. To qualify, you must have a PhD and 2+ years of experience in drug metabolism and medicinal chemistry. Experience in enzyme kinetics, pharmacokinetics and HPLC methods development would be beneficial. Excellent interpersonal, communication, and analytical skills a must. Dept. Code CJM98582

Senior Assistant Scientist/

Associate Scientist
You will conduct in vitro drug metabolism related experiments to support drug discovery. Key responsibilities include conducting experiments to determine metabolic stability, metabolite identification, cross-species comparisons, drug-drug interactions, and CYP2D6 polymorphic drug metabolism potential. To qualify, you must have a BS or MS, 1+ years of related experience, with a strong background in drug metabolism and HPLC methods development. Excellent interpersonal, communication and analytical skills a must. High throughput bioanalytical or metabolism methods and LC/MS analytical data interpretation is beneficial. Dept. Code CJM98581

Postdoctoral Fellow

In this role, you will work within a group setting in a behavioral pharmacology lab. Key responsibilities include developing behavioral tests in a variety of species related to psychiatric, neurological, and neurodegenerative diseases. To qualify, you must have a PhD in a neuroscience area with an emphasis on behavioral testing of animals. Strong experience with in vivo animal models for CNS diseases, and programming of operant equipment is essential. A solid record of scientific publications is beneficial. Dept. Code CJMLM

We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. For confidential consideration, please forward your resume, indicating appropriate

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TALENTED MOLECULAR **BIOLOGIST**

to join its full-time staff in New York, as an Assistant Editor. This position provides a superb opportunity to enter the world of scientific publishing while staying at the forefront of modern research. The successful candidate will work closely with other members of the editorial team on all aspects of the editorial process, including manuscript selection, commissioning and editing reviews, writing for the journal and liaising with the scientific community.

The ideal applicant will have a PhD and postdoctoral research experience in molecular biology (preferably with some knowledge or experience of structural biology), good writing skills and standing within the community, and a keen interest in the communication of science.

Please submit a CV, a short 800-1000 word News and Views-style article on an exciting, current and newsworthy area of molecular/structural biology and a short cover letter explaining your interest in the position to:

The Editor Nature Structural Biology 345 Park Avenue South, 10th Floor New York, NY 10010-1707 Fax: 212 679 0735

e-mail: nsb@naturenv.com

The closing date for applications is the 11th of December.



Nature America Inc.

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TULARIK... Creating Drugs that Regulate Genes.

Headquartered in a 66,000 square foot, state-of-the-art research building, with construction of an adjacent 80,000 square foot facility nearing completion, **Tularik Inc.** is a rapidly growing, privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. We have ongoing projects in the following areas: immune disorders, inflammation, obesity, hypercholesterolemia, viral diseases, bacterial diseases, cancer and nuclear receptors. Our continued growth has created exciting career opportunities for dedicated scientists to help us shape the future of human therapeutics.

Scientist Nuclear Receptors

The successful candidate will engage in research aimed at the identification and characterization of novel nuclear receptors that are candidates for the apeutic modulation. This individual will have a strong desire to exploit the opportunities offered by nuclear receptors for the discovery of new classes of drugs. The position requires a Ph.D. and at least 2 years of postdoctoral experience in molecular biology and biochemistry. (Position Code SC1204-TR)

Scientist Obesity

The successful candidate will play a key role in Tularik's cell-based and biochemical anti-obesity drug discovery program. The position requires a Ph.D. with relevant postdoctoral experience. A background in the area of nuclear hormone receptors, adipocyte biology or regulation of energy homeostasis is advantageous. (Position Code SC1204-GP)

Scientists Drug Discovery

We have several openings for creative, highly motivated scientists to supervise ongoing biochemical high throughput screens and to design new screens against validated targets in a number of areas, including our Bacterial Diseases and Nuclear Receptors Programs. Some positions emphasize basic research relating to the mechanism of action of novel drug leads at the biochemical and whole cell levels. Other positions focus on the development of novel robotic and bench-top approaches to drug lead identification and target validation. These positions require a Ph.D. and at least 2 years of postdoctoral experience. A solid background in biochemistry, enzymology and molecular biology is essential. Hands-on experience with robotics and automation is desirable. (Position Code SC1204-DD)

Scientists Pharmacology

We are looking for experienced pharmacologists to join our growing Preclinical Development Group. These positions require a Ph.D. in pharmacology and a minimum of 2 years of postdoctoral experience. Qualified candidates will have experience designing and implementing animal experiments relevant to drug discovery. Research experience in obesity/diabetes or immunology/inflammation is desirable. (Position Code SC1204-PT)

In addition to an attractive total compensation package, including competitive salary, comprehensive benefits and equity participation, Tularik offers experienced leadership and a stimulating research environment that recognizes achievement. To apply, please mail, fax or e-mail your resume to:

FOF

Tularik Inc.
HR Dept., Attn: Position Code___
Two Corporate Drive
South San Francisco, CA 94080
Fax: (650) 829-4303
Email: resume@tularik.com

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A New and Innovative Ph.D. Program

Cold Spring Harbor Laboratory announces a new Ph.D. program in the biological sciences to start in September 1999. An innovative Ph.D. curriculum takes advantage of the unique environment and extensive resources 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 logic and reasoning
- · a two-tier mentoring program

The training each student receives is designed to produce Ph.D. graduates who think critically and independently, and who communicate clearly and effectively.

A Varied Research Environment

The Laboratory's fields of research expertise include cancer biology, neurobiology, plant biology, molecular and cell biology, genetics, developmental biology, structural biology, virology, protein chemistry, cell cycle regulation, electrophysiology, behavior, imaging, bioinformatics, and genomics.

Student Support

The School of Biological Sciences will provide students with free tuition, a stipend, health insurance, subsidized housing, and research support. Students from around the world are encouraged to apply; we particularly welcome applicants from underrepresented minorities.

WHY COLD SPRING HARBOR LABORATORY?

- · A tradition of excellence
- · A world leader in biological research
- · A global meeting place for scientists
- An innovative four-year Ph.D. program designed for exceptional students

How to Apply

Application forms and information about the program and its faculty are available from:

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 e-mail: gradschool@cshl.org.

Also visit our Web site at: www.cshl.org/gradschool. The deadline for receipt of completed applications is February 1, 1999; late applications may be considered.

A GRADUATE SCHOOL UNLIKE ANY OTHER

...AT A PLACE UNLIKE ANY OTHER



CANCER BIOLOGISTS

The Department of Medicine and the Duke Comprehensive Cancer Center are soliciting applications for research faculty with expertise within the broad area of cancer biology. Individuals with a PhD or MD/PhD are being recruited at the Assistant or Associate Professor level. Both basic and disease-specific oncology research teams aim toward translational applications of innovative therapies. Candidates will join an environment of multiple collaborative potentials and participate in the academic life of the University and the Medical Center (see recent Time article at www.mc.duke.edu).

Submit letters of interest and CVs to: **Keith M. Sullivan, MD, Chief, Division of Medical Oncology and Transplantation, Box 3406, Duke University Medical Center, Durham, NC 27710.**

Auke University Medical Center

Duke University Is An Equal Opportunity/Affirmative Action Employer

MOLECULAR MICROBIOLOGY WOUND HEALING LABORATORY NATIONAL INSTITUTE OF NURSING RESEARCH

The Wound Healing Laboratory, National Institute of Nursing Research is recruiting for the position of research Molecular Microbiologist. The scientist is responsible for planning, conducting and directing studies of microbial pathogenesis related to wound healing. The position requires a Ph.D. or a M.D. with extensive postdoctoral experience in patient directed laboratory research; designing and performing experiments to investigate microbial pathogenesis; ability to interact with both laboratory and clinical investigators; and experience with research training. In addition, experience in the following is desirable: studies of the molecular mechanisms of microbial pathogenesis in the wound microenvironment; clinical microbiology; interactions between microbe and host; recombinant DNA technology, including DNA/RNA analysis and RT-PCR; experience in biochemical analysis, radiolabeling, immunofluorescence, immunohistochemistry, and handling of laboratory animals. The candidate should have published scientific papers in peer reviewed journals and is expected to plan, conduct and maintain an active program of collaborative research; to learn, develop and adapt new techniques as needed to explore pertinent research questions; to be able to work in a multidisciplinary interactive research environment; and to be knowledgeable about scientific resources at the NIH and elsewhere.

Further information about the position and qualification requirements may be obtained by contacting Ms. Cherry Earl at (301) 402-5490 or e-mail Cherry Earl@nih.gov. A curriculum vitae and bibliography and three letters of reference and two recent publications should be submitted by January 4, 1999 to Ms. Cherry Earl, Personnel Management Specialist, National Institute of Nursing Research, 31 Center Drive MSC 2178, Bethesda, MD 20892-2178.

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Faculty Positions Department of Human Genetics

A new Department of Human Genetics has been established at the University of Chicago, chaired by David H. Ledbetter, Ph.D. Strengths of the university genetics community include outstanding programs in cancer genetics, molecular cytogenetics, complex disease analysis, evolution, and population genetics. We are recruiting tenure-track faculty in broad areas of human genetics research, including (but not limited to) neurogenetics, cancer genetics, chromosome structure/function, and computational or experimental genomics. State-of-the-art research space is located in the new Institute for Molecular Medicine and generous start-up funds are available. Applicants must have a demonstrated ability to develop an independently funded research program of the highest caliber. Positions are open to Ph.D., M.D., or M.D./Ph.D. candidates. Individuals with ABMG board certification or eligibility are encouraged to apply. Although the search is primarily aimed at Assistant Professor level scientists, appointments at other levels, including senior appointments will be considered.

Interested applicants should send curriculum vitae, a short summary of research plans, and the names of three references to: Chair, Human Genetics Search Committee, Department of Human Genetics, The University of Chicago, 924 East 57th Street, JFK R-110, Chicago, IL 60637.

http://www.genes.uchicago.edu



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NIH Undergraduate Scholarship Program (UGSP)

If you would like to be trained and mentored at the cutting edge of biomedical research while receiving scholarship support, the UGSP may be for you!

The UGSP is sponsored by the National Institutes of Health (NIH), the Federal Government's lead biomedical research and research training agency, offering scholarships to qualified individuals to pursue undergraduate life sciences degrees.

Scholarships up to \$20,000 per year support tuition, educational, and qualified living expenses (room, board, transportation) while students pursue an undergraduate degree.

During each year of the award, scholars train for 10 weeks as paid employees in NIH research laboratories. They are assigned to mentors, participate in research seminars and developmental programs. Housing and transportation is provided. After graduation, 1 year of full-time research employment at NIH is required for each year of scholarship support.

You Should Apply If You:

- Can demonstrate a deep interest in pursuing a career in biomedical research;
- Can demonstrate being from a disadvantaged background;
- Have a GPA of 3.5 or better or are in the top 5 percent of your class;
- Are a U.S. citizen, national, or permanent resident;
- Are enrolled or accepted for enrollment as a full-time student at a qualified accredited institution.

This is a special opportunity for special students.



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We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals.

We have immediate openings at our Wilmington, DE facilities for the following:

Associate/Staff Scientists - Protein Crystallography Group
We are seeking protein chemists and physical biochemists who will join a
structural biology group and participate in structure function studies of
proteins with therapeutic value.

The successful candidates will possess a BS/MS degree with experience in protein purification and protein physical characterization. A broad base of knowledge in the characterization of ligand binding and protein purification from recombinant sources is required. Familiarity with any/all of the following is a plus: titration calorimetry, fluorescence, macromolecular crystallization, and protein stability optimization. (Code: RJF-PC)

Research Scientist/Senior Research Scientist -High Field NMR Group

The candidates we seek will work within a group of scientists devoted to NMR structural studies of proteins, protein-ligand, and protein-drug complexes. The successful candidates will be responsible for additional biophysical characterization using mass-spectrometry, surface plasmon spectroscopy, isothermal calorimetry, enzymology assays and analytical ultracentrifugation.

The successful candidates must possess a PhD with relevant post-doctoral experience and must be capable of initiating a research program in one of the above fields, particularly mass-spectrometry studies of protein-protein and protein-ligand complexes. Familiarity with X-ray and NMR structure determination requirements and molecular biology and protein expression involving novel labeling strategies at high yield is desirable. (Code: RJF-PD)

Associate/Staff Scientists - Chemical Enzymology Department
The candidates we seek will use their knowledge of protein biochemistry
and enzyme kinetics to interface with biologists and chemists to explore the
interactions of substrates and inhibitors of target enzymes, in the continuing
search for novel medicines to treat human diseases.

A BS/MS degree in Biochemistry background with a strong background in protein purification, protein analysis, enzyme kinetics and enzyme inhibition studies is required. Candidates should be familiar with modern methods for studying proteins, including: SDS-PAGE, Western blotting, HPLC and FPLC, and colorimetric, fluormetric and immunological assay development. Experience in a drug discovery environment is a definite plus. (Code: RJF-RC)

Our location, near Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. DuPont Pharmaceuticals Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume to: Human Resources -(Code), DuPont Pharmaceuticals Company, E400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.



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FACULTY POSITION CALIFORNIA INSTITUTE OF TECHNOLOGY

The California Institute of Technology offers a faculty position as **ASSISTANT PROFESSOR** of biology working in magnetic resonance imaging.

The successful candidate is expected to maintain an active independent research program, to teach, and to lead the development and administration of a planned magnetic resonance (MR) center. The position will be at the Assistant Professor level, and is tenure-track with an initial appointment of four years, although exceptional candidates at more advanced levels will also be considered. Applicants should have relevant training such as MR physics or imaging. They must have a Ph.D. degree and should have extensive experience in magnetic resonance research, particularly as applied to brain imaging. Essential qualifications are the ability to develop techniques in MR and the ability to apply MR to solve important biological problems.

Applications should include a curriculum vitae, a statement of research plan, and three letters of recommendation. This material should be sent to: The Magnetic Resonance Faculty Search Committee, California Institute of Technology, MC 216-76, 1201 East California Boulevard, Pasadena, CA 91125. Review of applications will begin on January 15, 1999, and will continue until the position is filled.

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

DEPARTMENT CHAIRPERSON OF ENVIRONMENTAL ENGINEERING SCIENCES UNIVERSITY OF FLORIDA

Applications and nominations are invited for the position of Chairperson of the Department of Environmental Engineering Sciences. The candidate will be expected to hold a Doctoral degree in an appropriate engineering or related field; have a proven record of excellence in teaching, research, and related scholarly activities; and demonstrate requisite management talents and interests.

The University of Florida is a member of the American Association of Universities, the largest institution of higher learning in the Southeast, and sixth largest in the nation. The College of Engineering is the third largest of the University's 21 colleges with 12 departments granting Baccalaureate, Master's, and Doctoral degrees.

The Department of Environmental Engineering Sciences has been an independent interdisciplinary department since 1966, is one of the largest in the field, has 20 faculty, and grants over 50 Baccalaureate, 20 to 30 Master's, and four to eight Doctoral degrees per year. The World Wide Web address is website: www.enveng.ufl.edu.

Address nomination and/or applications to: Environmental Engineering Sciences Department Chairperson Search Committee, c/o Dean of the College of Engineering, University of Florida, 300 Weil Hall, P.O. Box 116550, Gainesville, FL 32611 for receipt no later than 10 January 1999. The position is available summer or fall semester 1999. Applications should contain an up-to-date curriculum vitae and the names of five references.

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

FACULTY POSITION BIOPHYSICS UNIVERSITY OF MICHIGAN

The Department of Physics expects to fill one TEN-URE-TRACK position in the area of experimental or theoretical biophysics to begin September 1999. We are looking for an outstanding Junior Physicist who would strengthen our existing biophysics efforts and who would facilitate a strong interaction with a highly interdisciplinary program carried out in the Biophysics Research Division. Applicants should send a curriculum vitae, a brief research statement, and the names of at least three referees to: Ctirad Uher, Biophysics Search Committee, Randall Physics Laboratory, University of Michigan, Ann Arbor, MI 48109-1120. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.



MICROBIOLOGIST REED COLLEGE

The Reed College Biology Department invites applications for a tenure-track position at the AS-SISTANT PROFESSOR level to commence in the fall of 1999. A Ph.D. and postdoctoral experience are required. We seek an individual who will establish a competitive, molecular-based research program in prokaryotic physiology or pathogenesis. Start-up funding and release time for research are available. He/she should be broadly trained in microbiology and will teach an upper-division lecture/laboratory course in general microbiology and an advanced seminar course in his/her spe cialty. He/she will also participate in a teamtaught introductory biology course and direct year-long, senior thesis research in the biology and biochemistry/molecular biology programs. Reed College is a selective liberal arts institution with a distinguished record of educational accomplishment and a strong commitment to scholarship and undergraduate research (website: http://web. reed.edu/). Applications including curriculum vitae, statement of research interests, pertinent reprints, and three recent letters of reference should be sent by January 15, 1999, to: Dr. David Dalton, Search Committee Chair, Biology Department, Reed College, Portland, OR 97202-8199. Reed College is an Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSORS VERTEBRATE PHYSIOLOGY AND INSECT ECOLOGY

The Department of Biology, University of Minnesota-Duluth (website: www.d.umn.edu/biology) seeks applications for two tenure-track Assistant or, under exceptional circumstances, Associate Professors (non-tenured) in vertebrate physiology and insect ecology, the latter preferably aquatic. Successful candidates will develop a well-rounded teaching and research program at the undergraduate and graduate level. Essential qualifications include a Ph.D. in the biological sciences or other terminal degree (e.g., D.Sc., D.Phil.) and evidence of research excellence such as peer-reviewed papers, grants, or awards. Send letter of application with names, postal and e-mail addresses, and telephone numbers of a minimum of four references; curriculum vitae; statement of teaching philosophy, interests, and experience; statement of re-search experience and interests; and reprints or preprints of up to five relevant publications to: Dr. John Pastor, Vertebrate Physiologist Search Committee Chair, or Dr. Gerald Niemi, Insect Ecologist Search Committee Chair, Department of Biology, University of Minnesota-Duluth, Duluth, MN 55812. Review of completed applications will begin on January 4, 1999, and will continue until the position is filled. We encourage applications from underrepresented minorities in the biological sciences. The Unipersity of Minnesota is an Equal Opportunity Educator and Employer

Susquehanna University. ASSISTANT PROFES-SOR of biology with a specialty in animal behavior. Tenure-track position to begin in August 1999. Demonstrated success or evidence of potential to excel in teaching and advising undergraduates essential. Teaching duties include introductory-level biology and offering one course per year in the specialty. An active research program in animal behavior, preferably at the organismal level, is expected. Commitment to fostering student involvement in one's research is necessary. Ph.D. required. Located in the scenic Susquehanna valley one hour north of Harrisburg, one hour east of State College, about three hours from New York, Philadelphia, and Washington, D.C. (see website: www.susqu.edu). Send curriculum vitae, statement of teaching philosophy, brief description of research plans, copies of graduate transcripts, and three letters of recommendation to: Jack Holt, Head, Department of Biology, Susquehanna University, Selinsgrove, PA 17870. Review of applications begins January 15, 1999. Affirmative Action/Equal Opportunity Employment. Applications from women and persons of color encouraged.



MONMOUTH UNIVERSITY

FACULTY POSITION ASSISTANT PROFESSOR OF BIOLOGY Monmouth University

Tenure-track Assistant Professor position available July 1, 1999. Ph.D. or equivalent and one to three years of postdoctoral research and/or teaching experience required. Commitments to quality in undergraduate teaching and in directing undergraduate research are required. A strong background in some component of the biochemistry, genetics, molecular biology specialties is required. The successful candidate will be expected to teach general biology, as well as one or more of the courses in biochemistry, genetics, and molecular biology. Applicants (1) a letter of application summarizing must submit teaching qualifications (include a short statement of teaching philosophy); (2) curriculum vitae; (3) a onepage plan for directing undergraduate research (include support and equipment required); and (4) at least two letters of recommendation to: Dr. Frank Lutz, Dean, School of Science, Technology, and Engineering, Monmouth University, West Long Branch, NJ 07764-1898. All materials must be received by January

Monnouth University is an Affirmative Acton/Equal Opportunity Employer.

PLANT SYSTEMATIST

The Department of Biology at The University of Akron invites applications for a tenure-track faculty position in plant systematics at the rank of **ASSISTANT PROFES-SOR** to begin August 30, 1999. Salary commensurate with qualifications and experience. Start-up funds available. Candidates must hold a Ph.D. degree and have postdoctoral experience. The applicant will teach under-graduate and graduate courses. The successful candidate is expected to develop an externally funded research program in plant systematics employing contemporary mo-lecular, morphological, and statistical techniques, and to advise graduate students. The University of Akron is the third-largest state university in Ohio, with more than 23,500 students. The university is in a metropolitan setting with diverse cultural and recreational opportunities, including the nearby Cuyahoga Valley National Recreation Area. Review of applications will begin January 19, 1999. Send a letter of application, curriculum vitae, copies of recent publications, statements of research and teaching interests, and three letters of recommendations to: Dr. Randy Mitchell, Chair, Plant Systematics Search Committee, Department of Biology, The University of Akron, Akron, OH 44324-3908. For further information, review the Biology Department's website: http://www.uakron.edu/biology/. The University of Akron is an Equal Opportunity/Affinnative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and the disabled are encouraged to apply.

ECOLOGY

The Department of Zoology, University of British Columbia (UBC), invites applications for a tenure-track ASSISTANT PROFESSOR in experimental population/community ecology. Candidates working with freshwater, marine, or terrestrial systems are particularly encouraged to apply. The successful applicant will be expected to teach core and upper-level courses in ecology and organismal biology and to play an active role in the UBC Centre for Biodiversity Research.

The position is expected to start July 1, 2000; interviews will take place in spring 1999. Appointment is subject to final budgetary approval. Applications should contain a summary of research interests, a curriculum vitae, reprints of three key publications, and the names of three referees who have been asked to provide letters of reference. These should be directed to: Dr. J. N. M. Smith, Department of Zoology, University of British Columbia, 6270 University Boulevard, Vancouver, British Columbia V6T 1Z4 Canada. FAX: 604-822-5780.

Closing date for application is January 15, 1999.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of British Columbia hires on the basis of merit and is committed to Employment Equity. We encourage all qualified persons to apply.

RESEARCH POSITIONS IN MOLECULAR CARDIOPULMONARY MEDICINE

Positions are available to study signaling in cardiac hypertrophy/failure and asthma. Our laboratories utilize integrated molecular and biochemical techniques in tissue and transgenic models to investigate basic mechanisms of G protein-coupled receptor signaling with particular relevance to disease (PNAS 94:8121-8126, 1997; PNAS 95:10140-10145, 1998; JBC 272:7338-7344, 1997; Mol. Pharm. 54:44-49, 1998). Postdoctoral candidates should have a Ph.D. or M.D. with a strong background in molecular biology or biochemistry. A Research-Track Assistant Professor position is also available.

The University of Cincinnati, an Equal Opportunity Employer, is an outstanding environment for biomedical research and the Principal Investigators' NIH-funded laboratories provide exceptional environments for scientific achievement and career development. Stipend and benefits are highly competitive.

Candidates should send a letter of interest, curriculum vitae, and names of three references to: Gerald W. Dorn II, M.D. and Stephen B. Liggett, M.D., University of Cincinnati, Cardiopulmonary Molecular Pharmacology, 231 Bethesda Avenue, ML 0590, Cincinnati, OH 45267-0590. (Fax: 513-558-3060) E-mail: dorngw@ucmail.uc.edu.

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Progenics Pharmaceuticals Inc. is a leader in the Discovery and development of innovative treatment for cancer & viral diseases. We have collaborations with leading academic institutions and major pharmaceutical companies in the US and abroad and encourage presentation of scientific advances at meetings and in learning journals. The continued growth of the company has created outstanding opportunities for highly motivated, team-oriented individuals with experience and talent in the following areas:

Director of Regulatory Affairs - An individual with BS and/or MS in bio-sciences with 7-10 yrs experience in pharmaceuticals, CBER, familiarity with INDs for biologics with experience in CMC submissions, adverse event reporting & BLA's essential. Worldwide filing a plus.

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Senior Scientist, Molecular Biology and Gene Expression - An outstanding opportunity exists for a highly motivated, hands-on scientist with a PhD, and 2-4 years' industrial experience in molecular biology, cell line development, and high-level expression of novel recombinant proteins in prokaryotic and eukaryotic systems. The successful candidate will possess a strong record of scientific publications that demonstrate outstanding proficiency in gene isolation, cloning, analysis, engineering, and expressions. This individual will play a leadership role in devising and implementing innovative applications of molecular biology to further the Company's ongoing research and development efforts in virology and oncology.

Biostatistician - MS or PhD, 5 years exp with clinical trials, database management and analysis, preferably cancer area. Design statistical sections of Phase I & II protocols, input into CRF design and write stat section of NDAs, INDs and other publications.

Research Scientist - BS/MS for discovery research with skills in immunology, protein biochem & tissue culture. 2 years industrial experience.

Research Associates - Outstanding individuals with a BS/MS degree and significant experience in one or more of the following areas: immunology, molecular and cellular biology, oncology, virology, and oGMP biologics manufacturing.

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efits & ESOP programs. Send CV with salary regs to: PO Box 549, Tarrytown, NY 10591; Fax: (914) 789-2863; or E-mail: HR@Progenics.com



Acacia Biosciences, Inc. is a rapidly growing, privately held drug discovery technology company committed to the creation of proprietary assay systems and databases that facilitate the rapid development of biopharmaceuticals and agricultural chemicals. We have the following immediate openings for talented individuals to join our team:

Biochemical Pharmacologist/Medicinal Chemist

You will join a research team producing genome-wide gene expression patterns for the evaluation of pharmaceutical and agricultural lead compounds. The qualified candidate will possess a strong knowledge of drug metabolism and mechanism of action. Experience in the isolation and identification of metabolites is desirable. A Ph.D. in Pharmacology, Medicinal Chemistry, or a related field, plus 2-5 years of postdoctoral experience (preferably in the pharmaceutical industry) is required. Job #98-29.

Automation Scientist

As a member of the automation group, you will help develop the biological robotics and instrumentation to expand production capacity through the interface of commercially available equipment, or the implementation of custom-designed instruments. The ideal candidate will have extensive knowledge of commercial instrumentation and robotics, mechanical design capabilities, computer programming skills, and experience in molecular biology, microbiology, or chemistry. Requires a Ph.D. in an engineering or science discipline (or equivalent), and 1-3+ years of industry experience. Job #98-28.

We offer a competitive compensation and benefits package, stock options, and a challenging work environment. Please send your résumé or C.V. to: Acacia Biosciences, Inc., Human Resources Dept., Attn: Job #, 4136 Lakeside Drive, Richmond, CA 94806. Fax: (510) 669-2334; e-mail: hr@acaciabio.com. Acacia is an Equal Opportunity Employer.

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University of California, San Francisco

POSTDOCTORAL FELLOWSHIP

Available in 1999 in the laboratory of **Dr. Robert Farese, Jr.** Areas of investigation include molecular genetics of cellular metabolism, specifically 1) functional comparison of cholesterol esterification (ACAT) enzymes, & 2) functional analysis of DGAT and triglyceride synthesis pathways. Experience with lipid metabolism & physiology, molecular or cell biology, and mice preferred. M.D./Ph.D. or Ph.D. required.

Please send CV and references to: Job #C99-001

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E-mail: hr@gladstone.ucsf.edu Web: http://gladstone.ucsf.edu

Equal Opportunity/Affirmative Action Employer

Faculty position at Johns Hopkins University. The Department of Earth and Planetary Sciences invites applications for a tenure-track faculty position at the ASSIST-ANT PROFESSOR level beginning July 1, 1999, or later.

We seek outstanding candidates who would strengthen our teaching and research program on processes involved in climate change. Possible areas of research include, but are not limited to, physical and chemical interactions between the ocean and the atmosphere, atmospheric chemistry, remote sensing, and the interrelationships between climate and tectonics or the biosphere. Applicants should have rigorous training in quantitative aspects of the geosciences and broad interests that would complement one or more existing Departmental research groups. Collaborative relationships with research programs in other Departments such as Environmental Health Sciences, Geography and Environmental Engineering, and Sociology are also encouraged. Candidates whose research integrates combinations of field, laboratory, and theoretical approaches will be particularly favored.

We expect the successful applicant to develop a vigorous, independent research program and to participate fully in undergraduate and graduate teaching. A Ph.D. is required. Interested persons should send a résumé, a couple of reprints or preprints, statements of teaching and research interests, plus the names, mail and e-mail addresses, and telephone numbers of at least three persons from whom the Department may request letters of recommendation. Application materials should be addressed to: Dr. David R. Veblen, Chair, The Morton K. Blaustein Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, MD 21218. The search will close March 1, 1999, but later applications may be considered.

Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

TWO FACULTY POSITIONS IN ORGANISMAL BIOLOGY

Two tenure-track positions in organismal biology, broadly defined, likely at the ASSISTANT PROFES-SOR level, but one might be more SENIOR. Simultaneous applications from professional couples will be considered. We seek applicants with research interests in areas such as functional or comparative anatomy, evolution, systematics, behavior, ecology, or conservation biology, using plant or animal systems. Applicants must have a Ph.D. and a record of significant research accomplishment. Postdoctoral experience is preferred. Successful applicants are expected to develop active, funded research programs involving M.S./M.A. and Ph.D. students. Primary teaching responsibilities for one will include human anatomy. The other will support genetics, broadly defined. Teaching responsibilities will also include advanced courses in the applicants' area of expertise. Continuing excellence in both teaching and research is expected of both applicants. Please submit a curriculum vitae, concise statements of teaching and research interests, up to three representative publications, and the names and addresses of at least three references (include e-mail addresses and FAX numbers) to: Dr. George Bakken, Chair, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809. The second position is contingent on final budgetary approval. Duties begin August 20, 1999. Screening will begin December 7, 1998, and continue until the positions are filled. Further information is available at website: http://biology. indstate.edu/dls/. ISU is an Affirmative Action/Equal Opportunity Employer and encourages women and minority candidates to apply.

ASSISTANT DEAN

Paul Smith's College, the College of the Adirondacks, has an opening (June 1, 1999) for an Assistant Dean of natural resources, science, and liberal arts. Requires Doctorate in a discipline represented by the division; experience teaching in higher education; three years of administrative experience, excellent interpersonal skills, integrity, honesty, and openness. See website: www.paulsmiths.edu/jobs for more details. To apply, send a cover letter, résumé, names and addresses of three references to: Director of Personnel, Paul Smith's College, P.O. Box 265, Paul Smiths, NY 12970. Review of applications will begin December 1, 1998. Paul Smith's College values diversity and seeks to assure Equal Opportunity through its continuing Affirmative Action program.

POSITIONS OPEN



DREW UNIVERSIT

ASSISTANT PROFESSOR EVOLUTIONARY BIOLOGIST BIOLOGY

The Department of Biology of Drew University invites applications for a tenure-track position teaching evolution and organismal/population genetics at introductory and upper levels, a non-majors course, as well as a course in area of specialization, e.g., ornithology. Preference will be given to candidates with an organismal rather than molecular focus. Qualifications: Ph.D., demonstrated excellence/interest in undergraduate teaching, and commitment to research that involves undergraduates. Applications must be received by December 22, 1998. For details, wee website: www.drew.edu/cla/depts/bio/biol.html.

Send letter of application, curriculum vitae, statement of teaching and research interests, transcripts, three letters of reference, and evidence of teaching effectiveness to: Evolution Search Committee, Department of Biology, Drew University, Madison, NJ 07940.

Drew University is an Affirmative Action/Equal Opportunity Employer, and encourages applications from minorities and women.

FACULTY POSITIONS

Three tenure-track ASSISTANT PROFESSOR-SHIPS. August 1999, contingent upon funding. Ph.D. required. Candidates must have strong commitments to undergraduate education and establish research programs involving undergraduate and M.S. students.

PLANT ECOLOGIST. Preference given to individuals working in community, ecosystem, or landscape ecology. Teaching responsibilities include general ecology, plant ecology, and a course in area of expertise. Chair: Tom Nelson, e-mail: cftan@eiu.edu.

VERTEBRATE BIOLOGIST. Preference given to individuals working in functional morphology or herpetology. Teaching duties include comparative anatomy, vertebrate natural history, and a course in area of expertise. Chair: Robert Fischer, e-mail: cfruf@eiu.edu.

EVOLUTIONARY BIOLOGIST/SYSTEMATIST. Research area open to any taxonomic group or organizational level; preference given to individuals working with modern molecular techniques. Teaching duties include evolution, systematics, and a course in area of expertise. Chair: Gary Fritz, e-mail: cfgnf@eiu.edu.

Application should include letter of application, curriculum vitae, transcripts, three letters of reference, and a statement of teaching and research interests. Submit by January 1, 1999, to the appropriate: Search Chair, Department of Biological Sciences, Eastern Illinois University, 600 Lincoln Avenue, Charleston, IL 61920. FAX: 217-581-7141. Eastern Illinois University is an Equal Opportunity/Equal Access/Affinative Action Employer committed to achieving a diverse community.

COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS Department of Biochemistry and Molecular Biophysics

FACULTY POSITIONS are available as part of our continuing mission to maintain outstanding research and creative scholarship. We are especially interested in candidates (1) applying chemistry to solve important biological problems such as those in signal transduction or physiologically important pathways, or (2) creating methods for detecting or imaging cellular processes in vivo, or (3) exploring structures of interesting macromolecules by X-ray crystallography. Our department integrates biological structure with function through highly interactive collaborations between individual faculty members.

We encourage applicants who have a special desire to be in such an interactive environment, which integrates biophysical and biological disciplines. 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: Search Committee, Biochemistry and Molecular Biophysics, Box 36, 630 West 168th Street, New York, NY 10032.

We take Affirmative Action toward Equal Employment Opportunity.

POSITIONS OPEN

AQUATIC ECOLOGIST

The Department of Biology at The University of Akron invites applications for a tenure-track faculty position in aquatic ecology at the rank of ASSISTANT PROFES-SOR to begin August 30, 1999. Salary commensurate with qualifications and experience. Start-up funds available. Candidates must hold a Ph.D. degree and have postdoctoral experience. We seek a field-oriented Ecologist with research and teaching interests in ecological processes at the community or ecosystem scale, and who can take advantage of a new 400-acre nature preserve and field station located 20 miles from campus. We are especially interested in individuals who have a strong research emphasis in wetland and riparian systems. The candidate will be expected to develop an externally funded research program in his/her area of expertise and teach undergraduate and graduate courses. The University of Akron is the third-largest state university in Ohio, with more than 23,500 students, and the Department of Biology has 18 full-time faculty. Applicants should submit a curriculum vitae, a summary of teaching interests, a research statement, copies of recent publications, and three letters of recommendation to: Dr. Stephen C. Weeks, Chair, Aquatic Ecologist Search Committee, Department of Biology, The University of Akron, Akron, OH 44325-3908. Applications should be postmarked by January 19, 1999, to be given full consideration. For more information about this position, consult our website: www.uakron.edu/biology/aquateco.html. The University of Akron is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and the disabled are encouraged to apply.

ASSISTANT PROFESSOR BIOINFORMATICS Department of Biochemistry and Biophysics Texas A&M University

The Department of Biochemistry and Biophysics at Texas A&M University invites applications for a tenure-track position in bioinformatics. The appointment will be at the level of Assistant Professor (although inquiries for more senior candidates will be given consideration). This search is part of a significant University-wide programmatic expansion in genomics and bioinformatics. A Ph.D. and postdoctoral experience in the life sciences (or computer science with experience in biological applications) is required. The successful candidate will be expected to establish a vigorous research program, and to participate in undergraduate and graduate teaching. There are significant opportunities for collaboration with faculty conducting research in the areas of genomics, proteomics, structural biology (X-ray crystallography, NMR), and imaging technology. Applicants should submit a curriculum vitae, a statement of research and teaching interests, and have three letters of reference sent to: Bioinformatics Search Committee, Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX 77843-2128. Review of applications will commence on December 15, 1998, and continue until the position is filled. Texas A&M University is an Affirmative Acton/Equal Opportunity Employer, and committed to diversity.

ASSISTANT PROFESSOR. The Biochemistry and Cellular and Molecular Biology Department at the University of Tennessee at Knoxville seeks a GENETICIST or NEUROBIOLOGIST. We prefer an individual studying problems in neurogenetics. Opportunities for professional interaction include Geneticists and Neuroscientists in the department as well as at the University Hospital, the College of Veterinary Medicine, and the Life Sciences Division at Oak Ridge National Laboratory. Desired qualifications include several years of postdoctoral training, evidence of significant scientific productivity and of the potential to develop and maintain a vigorous, independent, and extramurally funded research program. Teaching responsibilities will include efforts at both the undergraduate and graduate level. For more information on the department visit the website: http://utkbiogw.bio.utk.edu/bcmbdept.nsf. Interested candidates should submit a résumé including research goals as well as teaching experience and goals and three letters of recommendation to: Ms. Donna Bryan, Secretary to the Search Committee, Biochemistry and Cellular and Molecular Biology Department, WLS M407, Univer-sity of Tennessee, Knoxville, TN 37996-0840. Review of applications will begin on January 15, 1999, and continue until the position is filled. UTK is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.



PROGRAM IN MOLECULAR MEDICINE

Mayo Foundation has recently established a new Molecular Medicine Program whose purpose is to establish a major gene therapy presence at Mayo Clinic. The Program in volves laboratory research, education, and clinical practice, and brings together basic scientists and clinicians working toward medically important goals.

A tenure-track position is currently available for an individual with a Ph.D. or M.D. degree with a strong research track record in the development of lentiviral vectors This faculty position is available with associated laboratory space, equipment start-up funds, and ongoing institutional support.

Interested applicants are asked to submit curriculum vitae, bibliography, statement of research interests, and names of three ref

Stephen J. Russell, M.D., Ph.D. Director, Molecular Medicine Program Mayo Clinic and Foundation 1821D Guggenheim Building 200 First Street S.W. Rochester, MN 55905

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.



Agricultural Research Service

United States Department of Agriculture

Permanent Interdisciplinary Biological (Agricultural) Engineer/ Physical Scientist/Biophysicist/Biochemist

The Instrumentation and Sensing Laboratory, NRI/BARC/ARS/USDA, Beltsville, Maryland, is seeking a full-time permanent research scientist/ engineer (Announcement #ARS-S9B-9007). The successful applicant will participate in developing techniques and instruments utilizing optical spectroscopy and imaging technologies to measure chemical, biological and/or physical characteristics associated with quality and safety of various food and agricultural products. Knowledge of instrumentation for biological materials; applied mathematics and statistical analysis; and sensor, optical or laser technology is required. Salary from approx. \$39,270/year (starting salary for GS-11) to \$72,758/year (top salary for GS-13). Life and health insurance, retirement plan, 2-3 weeks annual leave yearly plus holidays and sick leave. U.S. citizenship is required. Applicants must address and meet specific qualifications requirements defined in the vacancy announcement. For vacancy announcement call 301-504-1484 or visit www.ars.usda.gov. For any specific questions cal Beverley Jacobs at 301-504-1350 (voice) or 301-504-1373 (fax), e-mail:jacobs@ars.usda.gov. Specific questions regarding this position contact Dr. Yud-Ren Chen at 301-504-8450. USDA, ARS is an Equal Opportunity/Affirmative Action Employer. Applications must be post-marked by January 12, 1999.



Pioneer Hi-Bred International, Inc.

MOLECULAR BIOLOGISTS AND PROTEIN BIOCHEMISTS (PH.D., M.S., AND B.S. LEVELS)

Join a large and diverse team of scientists committed to the development of insect-resistant crops. These positions offer the opportunity to apply your skills and your creativity to exciting and fast-paced research. Successful candidates will assume key roles in established molecular biology and protein biochemistry groups. Research focuses on the rapid identification, isolation and characterization of insecticidal proteins, and on determining how those proteins interact with their insect targets at the molecular level. Protein engineering and directed evolution is used to improve the effectiveness of the insecticidal proteins in protecting transgenic crops against economically important pests. Successful candidates will be expected to show initiative and team leadership, and a strong ability to present ideas and results to others.

Molecular Biologists

Essential qualifications include demonstrable competence in the production and characterization of genomic and cDNA libraries and isolation of clones from them, DNA sequence analysis, PCR, oligonucleotide primer design, and Southern, northern, and western blot analysis, as well as familiarity with techniques of microbiology and protein biochemistry, gene modification and gene expression. Previous experience with receptor cloning and characterization is a plus. Computer skills should include expertise with DNA construct design, sequence alignments, manipulation of protein and nucleic acid sequences, and database analysis. One Senior Research Associate (Job #98361B) and one Research Associate (Job #98354B) will be hired.

Protein Biochemists

Candidates must be skilled in the purification and characterization of proteins from whole organisms, tissues, and over-expression systems. Experience is required with protein engineering and rational design, including molecular modeling, site-directed mutagenesis, and screening of mutants for desired properties. Previous work with receptor-ligand interactions will be beneficial. Computer skills should include expertise with sequence analysis and alignments, and with the use of gene and protein databases for predicting protein function. Two Senior Research Associates (Job #98352B & Job #98368B) and one Research Associate (Job #98360B) will be hired.

Educational Requirements

Senior Research Associates: Ph.D., or M.S. plus at least five years relevant experience, in protein biochemistry, molecular biology, or a closely related field as appropriate for the described positions. Research Associates: M.S. or B.S. plus at least three years relevant experience, in protein biochemistry, molecular biology, or a closely related field as appropriate for the described positions.

Please submit your resume in scannable format, including names of references, by December 31, 1998 to: Pioneer Hi-Bred International, Inc. ATTN: Human Resources - Research (Job #98xxxx), PO Box 1004, Johnston, IA 50131-1004; e-mail: jobsresearch @phibred.com, For more information on these positions visit our website www.pioneer.com. Pioneer Hi-Bred International, Inc. is an equal opportunity employer.

Wabash College invites applications for a Byron K. Trippet ASSISTANT PROFESSORSHIP in microbiology. Tenure-track position to start July 1, 1999. Ph.D and a commitment to excellence in teaching required; teaching experience desirable. Development of a research program involving undergraduates is expected. The Biology Department, with seven full-time positions, encompasses molecular biology, organismal biology, and population biology. The department is well equipped for teaching and research, and plans for a new science facility are in progress. In a two-year cycle, responsibilities include teaching a modern course in microbiology, a course in the applicant's special area of expertise, and participating in team-taught general biology. Periodic contributions to all-college interdisciplinary courses are expected. An endowed fund provides summer research stipend during the first two years, and start-up funds for research are available. Send letter of application, curriculum vitae, brief statement of research interests and teaching philosophy, and three letters of recommendation by January 8, 1999, to: Eric J. Wetzel, Biology Department, Wabash College, P.O. Box 352, Crawfordsville, IN 47933-0352. Questions may be directed to e-mail: wetzel@ wabash.edu. Information about the college and the department available at website: http://www.wabash. edu. Wabash College, a liberal arts college for men, encourages applications from women and minorities. Equal Opportunity Employer.

Tenure-track position at Florida International University (FIU) for fall 1999. The Southeast Environmental Research Program (website: www.fiu.edu/~serp) invites applications for appointments as ASSISTANT or ASSOCIATE PROFESSOR in environmental sciences, specializing in applications of stable isotope mass spectrometry. The position has a joint appointment with either the Department of Biological Sciences, Chemistry, Environmental Studies, or Geology. A Ph.D. is required and postdoctoral experience is preferred. The successful candidates are expected to establish active, externally funded research programs with emphasis in environmental research, demonstrate a commitment to excellence in teaching at the undergraduate and graduate levels, and manage the state-of-the-art SERP stable isotope mass spectrometry facility. FIU is member of the State University System of Florida located in suburban Miami with enrollment of over 30,000 students. Applicants should send a curriculum vitae, undergraduate and graduate transcripts, research plans, and three letters of reference to: Dr. Daniel Childers, Chair, Stable Isotope Mass Spectrometry Search Committee, Florida International University, Southeast Environmental Research Program, University Park, OE-148, Miami, FL 33199. Selection process will begin on December 30, 1998. FIU is an Equal Opportunity/Affirmative Action Employer.

LEHMAN COLLEGE CITY UNIVERSITY OF NEW YORK

Tenure-track ASSISTANT/ASSOCIATE PROFESSOR in microbiology. Ph.D. in appropriate area required. Preference given to plant-microbial interactions, microbial natural products, and/or urban microbial ecology. Position effective September 1, 1999. Salary range for Assistant Professor: \$32,062 to \$55,930 and Associate Professor: \$41,780 to \$66,837 per qualifications and experience. Send curriculum vitae and related materials to: Dr. Thomas E. Jensen, Professor and Chairman, Department of Biological Science, Lehman College/CUNY, 250 Bedford Park Boulevard West—D217, Bronx, NY 10468-1589 by February 5, 1999. Additional information at website: http://www.lehman.cuny.edu (see Job Opportunities). Affirmative Action/Equal Employment Opportunity/ADA Employer.

ASSISTANT PROFESSOR. Molecular and integrative pharmacology, tenure-track position in the Department of Pharmacology. Requirements: Ph.D. degree, postdoctoral experience, and potential to obtain external funding. Applicants should possess a strong background in molecular and cell biology and be able to pursue independent and collaborative research in the application of modern molecular techniques to the whole animal. Duties include teaching medical and graduate pharmacology. Send curriculum vitae, representative publications, research plans, and names of three references to: Dr. Vickram Ramkumar, Chair, Search Committee, Department of Pharmacology, Southern Illinois University School of Medicine, P.O. Box 19629, Springfield, IL 62794-9629 USA. FAX: 217-524-0145. The closing date for the position is January 31, 1999, or until filled. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The Department of Pharmacological and Physiological Sciences at the University of Chicago invites applications for tenure-track positions in pharmacology at the ASSISTANT or ASSOCIATE PROFESSOR level. The successful candidates will join a multidisciplinary department composed of 23 primary and 10 secondary faculty members whose research interests cover the areas of neurobiology of disease, developmental neurobiology, neuropharmacology, membrane receptors, signal transduction and second messenger mechanisms, membrane transport, structure and function of ion channels, vestibular and systems physiology, cytoskeleton, secretory pathways, and cell growth regulation. We are particularly interested in candidates working in molecular and cellular pharmacology or neuropharmacology. The successful candidate will be expected to participate in the teaching of the pharmacology curriculum in the collegiate and graduate divisions and in the Pritzker School of Medicine.

Applicants should provide a brief statement of research interests and plans, curriculum vitae and bibliography, and the names of three individuals who are willing to write letters of recommendation to:

Dr. Sangram S. Sisodia Pharmacology Search Committee Department of Pharmacological and Physiological Sciences The University of Chicago 947 East 58th Street Chicago, IL 60637

From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.

GLOBAL ENVIRONMENTAL CHANGE

The Department of Ecology, Evolution, and Organismal Biology at Tulane University (website: http://www.tulane.edu/~eeob/) invites applications for the position of ASSISTANT PROFESSOR (tenure track) in the area of global change. Our preference is for someone studying (terrestrial or aquatic) plant-atmosphere interactions at the ecosystem level. Evidence of outstanding research, publications, and teaching ability will be the primary criteria for this selection. The successful candidate will be expected to develop a strong research program and to teach at the undergraduate and graduate levels, including courses addressing environmental biology and global change. The candidate will also be expected to participate in Tulane's new interdisciplinary Ph.D. program in earth and ecosystem sciences. Preference will be given to individuals with postdoctoral/professional experience, demonstrated promise in research and teaching excellence, and willingness to interact across disciplines.

Each candidate should submit a curriculum vitae, a statement of research and teaching interests, copies of selected publications, and a list of three references by December 30, 1998. All materials should be sent to: Thomas Bianchi, Chair, Search Committee, Department of Ecology, Evolution, and Organismal Biology, 310 Dinwiddie Hall, Tulane University, New Orleans. LA 70118-5698.

Tulane University is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity. Applications from women and minority candidates are encouraged.

The Woodrow Wilson School of Public and International Affairs at Princeton University is seeking candidates for a position as ASSISTANT PROFESSOR, ASSO-CIATE PROFESSOR, or FULL PROFESSOR of science, technology, environment, and public policy. Demonstrated ability to illuminate public policy choices through analysis of scientific/engineering as well as economic/political possibilities and constraints and/or the application of social science tools to issues of scientific/ engineering policy. Interest in and ability for leadership role in small but lively teaching and research program Priority areas include life sciences and biotechnology, environmental management and global change, information and communications, research and development, and national security (see also website: http://www.wws.princeton.edu/~step). Résumé, statement of research/teaching interests, three publications/pieces of written work, and names and addresses of three references as soon as possible but no later than January 31, 1999, should be sent to: Dean Michael Rothschild/Science, Technology, Environment, and Public Policy Search Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Princeton University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION PATHOGENIC MECHANISMS

The Department of Molecular Genetics, Biochemistry, and Microbiology invites applications or nominations for an ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR. We are especially interested in candidates with research strengths in bacterial and viral pathogenesis including but not limited to HIV, sexually transmitted organisms, and emerging pathogens. We seek an individual with the capability and desire to utilize genomics including information generated by the various genome initiatives.

With 28 full-time faculty, we maintain strong active research programs in disciplines including molecular and cellular immunology, viral and microbial pathogenesis, differentiation, developmental and cancer biology, human genetics, structural biology, and membrane transport. We support an active graduate program and maintain core facilities accessible to all University faculty, for production of transgenic and knockout mice and DNA synthesis and sequencing. These opportunities are complemented by mouse physiology and pathology services in other departments and by the Barrett Cancer Center and the Cardiovascular Center, providing a breadth of research opportunities unparalleled at most research institutions.

Our program can be visited through our website: http://ucmg65.med.uc.edu/. Applicants should submit a curriculum vitae, brief description of research program, and the names of three qualified references to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry, and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524.

Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK POSITIONS DEPARTMENT OF PHYSIOLOGY University of Tennessee, Memphis

The University of Tennessee, Memphis Department of Physiology is actively recruiting for two tenure-track faculty positions. Academic rank is dependent upon experience and qualifications. Candidates should have a Ph.D. or M.D. degree, a good track record in publications, and postdoctoral research experience with a background in cellular and/or molecular biology. The abilities to establish an independent research program in the areas of cardiovascular, gastrointestinal, developmental, endocrine, or epithelial physiology and to engage in teaching activities of the department are expected.

Applicants should send a curriculum vitae, copies of three representative publications, and the names of three references to: Dr. Leonard R. Johnson, Chair, Department of Physiology, University of Tennessee, Memphis, 894 Union Avenue, Memphis, TN 38163. The University of Tennessee is an Equal Employment Opportunity/ Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer. Minorities and females are encouraged to apply.

INSTRUCTOR HARVARD MEDICAL SCHOOL New England Regional Primate Research Center

The Division of Immunology invites applications for a faculty position to conduct research on hematopoietic stem cell gene therapy for AIDS in nonhuman primates. We are seeking candidates with at least three years of postdoctoral experience, including expertise in the isolation and transduction of hematopoietic stem cells, hematopoiesis, and flow cytometry. Send curriculum vitae and names of three references to: R. Paul Johnson, M.D., New England Regional Primate Research Center, Harvard Medical School, One Pine Hill Drive, P.O. Box 9102, Southborough, MA 01772. E-mail: paul_johnson@hms.harvard.edu.

Biology/zoology. Anticipated tenure-track position commencing August 1999 at rank of ASSISTANT PROFESSOR. Earned Doctorate in zoology, ecology, or related area required. Teaching responsibilities may include limnology, zoology, anatomy/physiology, and general biology. Opportunity to curate a recently acquired malacology collection. Send curriculum vitae, letter of application, and three letters of recommendation to: Dr. J. Larry Martin, Dean, School of Arts and Sciences, Missouri Southern State College, 3950 East Newman Road, Joplin, MO 64801-1595. Questions to: J. Messick, Telephone: 417-625-9617; e-mail: messick-j@mail.mssc.edu. Closing date: February 12, 1999. Missouri Southern State College is an Equal Employment Opportunity/Affirmative Action Employer.

THE 1999 LOUISA GROSS HORWITZ PRIZE

QUALIFICATIONS FOR THE AWARD

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

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

The prize consists of an honorarium and a citation, which are awarded at a special presentation event. Unless otherwise recommended by the Prize Committee, the prize is awarded annually. The 1998 awardees were Arnold J. Levine, Ph.D., Harry C. Wiess Professor in Life Sciences at Princeton University (currently President, Rockefeller University), and Burt Vogelstein, M.D., Professor of Oncology at Johns Hopkins University.

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

Nominations for prospective recipients should be given to the Chairman of the Louisa Gross Horwitz Prize Committee, Dr. Carol Prives. Nomination letters should include:

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

An original and twelve (12) copies of each nomination should be sent to: Dr. Carol Prives, Chairman of the Louisa Gross Horwitz Prize Committee, Office of the Vice President for Health Sciences and Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York, NY 10032.

Deadline for the receipt of nominations is January 15, 1999.



science serving society

The Theoretical and Biophysics (T-10) and Structural Biology (LS-8) Groups at Los Alamos National Laboratory are initiating a high throughput structural biology initiative to capitalize on information acquired from the Human Genome Sequencing Project. As a part of this initiative, applications are invited for a MS level technician with demonstrated expertise in DNA cloning, DNA amplification by PCR, large-scale overexpression and purification of proteins

The position will be initially for one year and can be extended up to three years. Salary will be \$35,556.00 to \$62,422.00, depending on experience and education. For further information on this position and application process please refer to www.hr.lanl.gov (reference job # 994221). Specific questions about the position please contact Dr. Goutam Gupta at: Phone: 505-665-2587, e-mail: gxg@t10.lanl.gov.

Applications containing CV and three letters of reference should be sent to:

Dr. Goutam Gupta Science 994221 Theoretical Biology & Biophysics, T-10, MS-K710 Los Alamos National Laboratory Los Alamos NM 87545

www.lanl.gov EOE

Los Alamos NATIONAL LABORATORY

Operated by the University of California for the Department of Energy



Rochester Minnesota

The DIVISION OF CARDIOVASCULAR

MEDICINE at Mayo Clinic invites applications for clinician investigator in the field of vascular biology. The candidate should be a M.D. or a M.D.-Ph.D. with clinical training in cardiology and vascular medicine who is highly trained in vascular gene transfer techniques. Two-year post-residency training in vascular gene transfer and vasomotor studies is required. Candidate must be licensable in the state of Minnesota. We seek a clinician investigator who is eager to commit a significant amount of time to research and to practice vascular medicine. The candidate would also have teaching responsibilities in areas pertaining to vascular biology.

Interested applicants should submit a curriculum vitae, a statement of research interests and long-term goals, and three references by December 30, 1998, to:

A. Jamil Tajik, M.D., Chair Division of Cardiovascular Diseases Mayo Clinic 200 First Street S.W. Rochester, MN 55905

Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

ASSISTANT PROFESSOR

The Department of Ecology and Evolutionary Biology (EEB) at the University of Tennessee, Knoxville seeks a Plant Ecologist whose research focuses on the community/ecosystem level for a tenure-track position as an Assistant Professor. Ph.D. required. Desired qualifications include field or laboratory experience, postdoctoral training or equivalent experience, and evidence of exceptional scientific productivity and of the potential to develop and maintain a vigorous, independent, extramurally funded, nationally recognized research program. Excellent teaching is expected; responsibilities will include effort at both the undergraduate and graduate level, particularly contributing to a sophomore-level ecology course. It is hoped that the applicant's interests will mesh with strengths of EEB; see website: http://www.bio.utk.edu. Interested candidates should submit a résumé indicating research goals, teaching experience and goals, and three names, addresses, telephone numbers, and e-mail addresses of references, to:

Dr. Louis J. Gross and Dr. Susan E. Riechert Co-Chairs of the Search Committee Department of Ecology and Evolutionary Biology 569 Dabney Hall University of Tennessee Knoxville, TN 37996-1610

Review of applications will begin on January 15, 1999, and continue until the position is filled. UTK is an Equal Employment Opportunity/Title VI/Title IX/Section 504/ADA/ADEA Employer.

FACULTY POSITION UCLA MEDICAL SCHOOL

The Department of Pathology and Laboratory Medicine invites applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level in the field of molecular mechanisms of carcinogenesis. Areas of focus for prospective candidates may include mechanism of action of genotoxic or nongenotoxic carcinogens, receptor-mediated carcinogenesis, metabolism of carcinogens, genetic susceptibility to carcinogenesis, and anticarcinogenesis.

This recruitment builds on the outstanding scientific environment and attractive Westwood campus of UCLA. A comprehensive set-up package of state-based salary and operational resources will be available to the successful candidate. Qualified applicants possessing the M.D., Ph.D., or equivalent degree should send curriculum vitac statement of research interests, and the addresses, telephone numbers, and e-mail addresses of three references to: Oliver Hankinson, Ph.D., Search Committee Chair, Department of Pathology and Laboratory Medicine, University of California, 10833 Le Conte Avenue, Los Angeles, CA 90095-1732.

NORTHWESTERN UNIVERSITY DEPARTMENT OF GEOLOGICAL SCIENCES

The Department of Geological Sciences invites applications for two tenure-track positions at the rank of ASSISTANT PROFESSOR. Candidates are expected to complement existing areas of departmental expertise, and to develop strong cross-disciplinary research and teaching in such domains as crust and mantle processes, and sediment, water, atmosphere, and life interactions. Applications should include a statement of research accomplishments and future directions, curriculum vitae, copies of significant publications, names of at least three professional references, and be received by January 8, 1999. Address applications to:

Search Committee, Department of Geological Sciences 1847 Sheridan Road Northwestern University Evanston, IL 60208-2150 Website: http://www.earth.nwu.edu

Women and members of minority groups are encouraged to apply. Northwestern is an Affirmative Action and Equal Opportunity Employer.

POSITIONS OPEN

ATMOSPHERIC DYNAMICS POSITIONS

We invite highly qualified candidates to apply for up to two TENURE-TRACK FACULTY POSITIONS to complement the School's current research and teaching program in atmospheric dynamics. Applicants should have a Ph.D. and have broad interests in Earth system science. Successful candidates will be expected to develop strong, independent research programs and participate in the graduate and undergraduate education programs of the School.

The atmospheric dynamics positions are targeted toward individuals having an expertise in climate dynamics or mesoscale dynamics. Additional desirable qualifications include a background in modeling climate, mesoscale, and/or boundary layer processes, and an interest in interacting with faculty members of the School. A background in physical meteorology would also be beneficial. The positions are open to both junior and senior-level candidates.

Applicants should send a résumé, selected reprints, a statement of professional research and teaching goals, plus the names, addresses, e-mail addresses, and telephone numbers of at least three persons whom we may contact for references to:

Chair

Atmospheric Dynamics Search Committee School of Earth and Atmospheric Sciences Georgia Institute of Technology Atlanta, GA 30332-0340

TERRESTRIAL PLANT ECOLOGIST

California State University Fullerton, Department of Biological Science is seeking applicants for a full-time tenure-track position as ASSISTANT PROFESSOR of biology with expertise in evolutionary ecology, conservation ecology, or population ecology/genetics to begin in August 1999. The successful candidate will help develop and teach a freshman course in integrative biology/bio-diversity/evolution and upper-division/Master's-level elective courses in plant biology and evolutionary ecology. The individual will be expected to develop an active, student-involved, externally funded research program. Applicants must have a Ph.D., postdoctoral experience, teaching experience, a strong background in integrative biology, and be committed to excellence in teaching at both the undergraduate and Master's levels.

Applicants should send curriculum vitae (including a history of grant support), research plans, and reprints of peer-reviewed publications, a summary of teaching philosophy (including teaching experience and upper-division elective course preferences), and three letters of recommendation to: Chair, Terrestrial Plant Ecology Search Committe, Department of Biological Sciences, California State University, Fullerton, P.O. Box 6850, Fullerton, CA 92834-6850. Website: http://biology.fullerton.edu/. Review of applications will begin 11 January 1999 and continue until a suitable candidate is appointed. Women and minority candidates are particularly encouraged to apply. CSUF is an Affirmative Action/Equal Opportunity/Title IX/ADA Employer.

EVOLUTIONARY BIOLOGIST UNIVERSITY OF CALIFORNIA, RIVERSIDE

The Department of Biology seeks an Organismal Evolutionary Biologist at the junior (tenure-track ASSIST-ANT PROFESSOR) level. We seek an Evolutionary Biologist working at the interface between the individual and the environment; relevant areas of interest include evolutionary physiology, functional morphology, and ecological genetics. The successful candidate will join a well-established program in evolutionary biology, establish a vigorous research program, contribute to under-graduate and graduate training, and participate in our interdepartmental graduate research unit in evolution and ecology. Applicants must have a Ph.D. degree with two or more years of postdoctoral training and a strong record of research accomplishment. A curriculum vitae, statement of research interests, copies of relevant publications, and at least three letters of reference should be sent to: **Chair**, Organismal Evolutionary Biologist Search, Department of Biology, University of California, Riverside, CA 92521. Review of applications will begin 30 January 1999. The University of California is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR BIOCHEMISTRY AND MOLECULAR BIOLOGY

Indiana University School of Medicine Evansville Center for Medical Education

Applications are invited for a tenure-track position in biochemistry. Candidates should have a Ph.D. or M.D., at least three years of postdoctoral experience, and research interests and expertise in molecular/cellular immunology. The successful applicant will develop an extramurally funded research program and participate in the teaching of biochemistry to medical students. We offer an attractive start-up package and generous laboratory space in our new facility. Review of applications will begin February 1, 1999, and continue until position is filled. Send curriculum vitae, a summary of research acheivements, a brief research plan, and the names of three references to: Dr. G. Tunnicliff, Biochemistry Search Committee, Indiana University School of Medicine, 8600 University Boulevard, Evansville, IN 47712. Website: www.medlib.iupui.edu/ecme/biochem.htm.

Indiana University is an Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF PHYSIOLOGY

Tenure-track, 12-month, state-funded position as Assistant/Associate Professor. Applicant must have Doctoral degree, molecular biology expertise, with postdoctoral experience and potential to develop an extramurally, independently funded research program. The Department has six faculty whose strengths are in cardiovascular and cell/membrane biology. Area of expertise is open for a scientist who will complement our existing strengths. Collaborations opportunities exist throughout the University in a growing and competitive research community. Ample start-up package, excellent benefits, competitive salary, and beautiful location.

Candidates should submit a letter, curriculum vitae, three references to: Dr. William L. Joyner, Professor and Chair, Department of Physiology, James H. Quillen College of Medicine, East Tennessee State University, Box 70576, Johnson City, TN 37614. An Affirmative Action/Equal Opportunity Employer.

The Chemical Engineering and Materials Science Department at the University of Minnesota invites nominations and applications for the position of ASSISTANT PROFESSOR in the general area of chemical engineering of biochemical systems. A successful candidate will have a Ph.D. in engineering, physical science, or applied mathematics. The Department has a long tradition of intradepartmental as well as interdisciplinary collaborations to create new teaching and research ventures. Exceptional individuals with training or accomplished research in biochemical engineering as well as those from nontraditional areas of research are encouraged to apply. The Search Committee will accept nominations and applications until the position is filled. Applications should include curriculum vitae and the names of three or more references. Please send nominations or applications to: Dr. Wei-Shou Hu, Professor, Chemical Engineering and Materials Science, University of Minnesota, 421 Washington Avenue S.E., Minneapolis, MN 55455-0132. Telephone: 612-625-0546; e-mail: acre@cems. umn.edu. More information on the department and its bioengineering program is available at website: http:// www.cems.umn.edu. The University of Minnesota is an Equal Opportunity Educator and Employer.

ASSISTANT PROFESSOR BIOCHEMISTRY

The Department of Biology, Hamilton College invites applications for a tenure-track position at the Assistant Professor level, effective 1 July 1999. Applicants must have a Ph.D.; postdoctoral and teaching experience are preferred. The successful applicant will teach part of an introductory course in biology, an upper-level course in general biochemistry, and one additional course, and will also supervise senior research projects. An ongoing research program emphasizing biochemistry and involving undergraduates is expected. Send curriculum vitae, statements about teaching and research, and three letters of reference to: Ernest H. Williams, Chair, Department of Biology, Hamilton College, 198 College Hill Road, Clinton, NY 13323-1292. Application materials must be received by 5 January 1999. Women and members of minority groups are encouraged to apply. Hamilton College is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION: UNIVERSITY OF ALBERTA PERINATAL RESEARCH CENTRE

The Perinatal Research Centre at the University of Alberta invites applications for a faculty position at the level of Assistant or Associate Professor. Qualifications include a Ph.D. or equivalent, at least two years of postdoctoral training, a demonstrated ability to conduct high-quality research and the potential to establish an externally funded research program. We are particularly interested in recruiting an individual with research interests in the areas of developmental neurobiology, myogenesis, or lung development. The Perinatal Research Centre is composed of basic and clinical investigators with a broad spectrum of interests pertaining to maternal, fetal, and neonatal health. These include members from the Departments of Physiology, Pharmacology, Cell Biology and Anatomy, Immunology, Pediatrics, Rehabilitation Medicine, and the Division of Neurosciences as well as the Faculty of Nursing.

The successful applicant must be prepared to utilize the Alberta Heritage Foundation for Medical Research, Medical Research Council of Canada, or other similar funding agencies for salary support. Appointment will be in an appropriate Department/Faculty.

Deadline for receipt of applications is February 15, 1999. Commencement date is negotiable. Please submit a curriculum vitae, brief statement of research interests and career goals, and the name of three references to:

Search and Selection Committee Perinatal Research Centre 220 HMRC University of Alberta

Edmonton, AB, T6G 2S2



For further information, consult http://www.ualberta.ca/PERINATAL.htm.

GLOBAL OPPORTUNITIES

R&D OPPORTUNITIES IN BIOTECHNOLOGY AND PHARMACEUTICAL RESEARCH

Union Chemical Laboratories (UCL) of the Industrial Technology Research Institute, the largest chemical R&D institute in Taiwan, ROC, is focused on providing in-depth expertise and technology in polymer, specialty chemical, medical device, pharmaceutical, and biotechnology for private sectors in Taiwan. Currently, UCL has 680 employees including 150 Ph.D. and 210 M.S. With the recent expansion of our biotechnology and pharmaceutical R&D efforts, UCL has created exceptional career opportunities for success-minded scientists.

R&D Managers, Project Leaders, and Scientists

Successful candidates should possess a Ph.D. in Molecular Biology, Biology, or a related discipline and at least 4 years of postdoctoral experience, preferably in the industrial settings, in the following areas: DNA cloning, genetic engineering, genomics and bioinformatics, recombinant protein expression and processing, and drug screening assay development. Strong communication skills along with the ability to work well in multidisciplinary teams are essential. Experience in biochip technology and bioinformatics is a plus.

Located in Hsinchu, 45 miles south of Taipei, UCL is situated adjacent to National Tsing Hua University, National Chiao Tung University, and Science-Based Industrial Park. The Science Park Experimental School offers a bilingual (Mandarin and English) program from primary through high school.

All applicants must be proficient in both Chinese and English. For immediate consideration, please submit your résumé to:

Ms. T. A. Ho Manager, Office of Human Resources Union Chemical Laboratories, ITRI 321 Kuang Fu Road, Sec. 2 Hsinchu, Taiwan, ROC

Telephone: 886-3-573-2336; Fax: 886-3-573-2343

nature medicine

seeks an **EDITOR**

Applicants are invited for the position of Editor of Nature Medicine. Nature America, the publisher of Nature Genetics, Nature Structural Biology, Nature Medicine, Nature Biotechnology and Nature Neuroscience, is seeking a successor to Adrian Ivinson, who is leaving Nature Medicine to take up the position of Publisher within the group. We are looking for a successor who will continue to develop Nature Medicine and build upon its reputation as the leading international biomedical research journal.

The Editor is responsible for the editorial content of the title, working closely with an experienced team based in our New York office. Regular contact and communication with the international biomedical research community is central to the role, to ensure that the journal continues to meet the needs of its diverse readership. Planning and managing editorial resources, as part of the senior management team of the company is an integral part of this job.

The ideal candidate will have a Ph.D. in a relevant field, exceptional scientific judgement, a broad-based knowledge and understanding of the biomedical research community and some experience in journalism.

Applications, which should include a curriculum vitae, a succinct (up to 1,000 words) assessment of the strengths and weaknesses of *Nature Medicine*, and a concise cover letter explaining your interest in this job, should be sent to Adrian J. Ivinson, Nature America Inc., 345 Park Avenue South, New York, NY 10010, Fax 212.696.9009 to arrive **no later than December 21st, 1998**.



Nature America Inc.

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

THREE POSITIONS CANADA DEPARTMENT OF FISHERIES AND OCEANS FRESHWATER INSTITUTE

Three positions at the RESEARCH SCIENTIST level will be filled April 1, 1999, at the Freshwater Institute (FWI), Department of Fisheries and Oceans, Winnipeg, Canada. Postdoctoral experience preferred. Research will be field-oriented and carried out at the Experimental Lakes Area (ELA), northwestern Ontario, as well as other locations in western Canada. Scientists at the ELA are members of dynamic multidisciplinary teams carrying out whole-lake manipulation experiments, studies of unperturbed boreal lakes, and their watersheds/airsheds, and in laboratory experiments at the FWI. Present areas of research at the ELA and FWI include toxic chemicals, habitat disturbance, climate change, and acidification recovery.

Each candidate is expected to develop his/her own research program in concert with departmental research priorities, and to integrate his/her program into a larger whole-ecosystem context. Candidates who are both good team members and have the potential to be leaders are encouraged to apply. The incumbent is expected to publish research in the primary scientific literature, present data at scientific meetings, and to provide advice to clients of the Department of Fisheries and Oceans. Applications are invited for:

(1) Fish Ecologist. A Ph.D. from a recognized university in fisheries biology or closely related field is required. The incumbent will plan and conduct original research and interpret data on the effects of habitat disturbance and contaminants on the small fish communities in experimentally manipulated boreal lakes as compared to reference lakes. Working as part of a team of researchers he/she will develop techniques to predict, reduce, and/or ameliorate the impact of human disturbances on aquatic ecosystems.

(2) Zoobenthic Ecologist. A Ph.D. from a recognized university in invertebrate zoology or closely related fields is required. The incumbent will plan and conduct original research to evaluate the impact of environmental perturbations on zoobenthic community structure and dynamics in boreal lakes, as compared to unperturbed ecosystems. This research should be closely linked to higher (e.g., small fish) and lower (e.g., benthic algae) components of the food web. Working with a team of researchers he/she will develop techniques to predict reduce and/or ameliorate the impact of human disturbances on aquatic ecosystems.

(3) Fish Physiologist. A Ph.D. in animal biochemistry, physiology, and/or toxicology or a closely related discipline from a recognized university is required. The incumbent will plan and conduct research on fish from ELA lakes (and regional aquatic ecosystems) and from controlled laboratory experiments, especially factors regulating growth, development, and reproduction in related areas of physiology and histology. Additional requirements include experience and knowledge of the molecular and cellular and physiological mechanisms of the toxic effects of chemicals, and of adaptive and acclimatization

responses of fish to chemical and physical stressors. For positions (1) or (2), send application to: **Dr. J.** Rudd, Freshwater Institute, Department of Fisheries and Oceans, 501 University Crescent, Winnipeg, Manitoba R3T-2N6 Canada. For position (3), send letter of application to: **Dr. J. Klaverkamp, Freshwater Institute.** A curriculum vitae, recent reprints, a one-page (maximum) description of current research and future interests/goals, as well as names and addresses of three references are required. Application deadline is December 31, 1998.

PLANT PHYSIOLOGIST. Tenure-track ASSIST-ANT PROFESSOR to teach plant physiology and other upper-division botany, participate in introductory biology or interdisciplinary education and management of the greenhouse, supervise student projects, and conduct research involving undergraduates. Starts September 1999. Ph.D. and teaching experience required. Prefer candidates with research in ecophysiology. Position description at website: www.sou.edu/biology or contact: Department of Biology, Southern Oregon University, Ashland, OR 97520. Review of applications will begin on January 1, 1999, and continue until position is filled. SOU is an Affirmative Action/Equal Opportunity Employer committed to development of an inclusive multicultural community.

POSITIONS OPEN



ASSOCIATE VICE PRESIDENT FOR AGRICULTURAL ADMINISTRATION Ohio Agricultural Research and Development Center

College of Food, Agricultural, and Environmental Sciences

The Ohio State University invites your nominations or application for the position of Associate Vice President for Agricultural Administration. This person also serves as **DIRECTOR**, Ohio Agricultural Research and Development Center (OARDC), and **ASSOCIATE DEAN**, College of Food, Agricultural, and Environmental Sciences.

Responsibilities: This leader will be the Chief Research Administrator of the College of Food, Agricultural, and Environmental Sciences and affiliated programs. This person interacts with faculty, staff, students, commodity leaders, legislators, and other stakeholders as an active participant and advocate of food, agricultural, and environmental sciences research as well as research that is funded in other colleges. The Associate Vice President is a member of an outstanding, cohesive administrative team representing research, extension, academic affairs, and international programs that reports directly to the Vice President for Agricultural Administration and Executive Dean of the College of Food, Agricultural, and Environmental Sciences.

Qualifications: The successful candidate is expected to have the following qualifications: an earned Ph.D. degree or equivalent in one of the food, agricultural, and environmental sciences or related disciplines; excellent communication, public relations, and interpersonal skills; demonstrated excellence in research; recognized vision and leadership ability; administrative experience at the university Department Chair level or equivalent; the ability to evaluate and nurture excellence in scholarship; outstanding intellectual depth, breadth, and a high level of energy; commitment to the land grant mission and to the internationalization of OARDC programs; able to earn tenure and the rank of Professor in one of the units supported by OARDC funding.

Salary and application: The salary is competitive, com-

Salary and application: The salary is competitive, commensurate with qualifications and experience. Applications will be reviewed beginning January 15, 1999, and continuing until the position is filled. Send up-to-date credentials and a statement of leadership philosophy to:

Dr. L. H. Newcomb Room 100 Agricultural Administration Building 2120 Fyffe Road Columbus, OH 43210 FAX: 614-292-1218

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

AQUATIC ECOLOGIST/LIMNOLOGIST

Anticipated tenure-track ASSISTANT PROFESSOR position for Ph.D. scholar/teacher with specific interests in animal ecology. Responsibilities include developing an extramurally funded research program and teaching limnology and other undergraduate/graduate courses depending on candidate's specialty. By 15 January 1999 please submit a letter describing teaching and research interests, a curriculum vitae, transcripts, three publications, and three letters of reference to: Chair, Aquatic Ecology Search Committee, Zoology Department, Oklahoma State University, Stillwater, OK 74078-3052. For additional information, Telephone: 405-744-5555; FAX: 405-744-7824; website: www.cas. okstate.edu/zoology/. Women and minorities are strongly encouraged to apply. Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CELL AND MOLECULAR BIOLOGY INTEGRATIVE BIOLOGY California State University, Fullerton Department of Biological Science

applications for two NON-TENURE-TRACK POSITIONS to begin in August 1999. The positions, cell and molecular biology and integrative biology, are classified as three-year appointments (Lecturer B), renewable annually based on satisfactory performance. The Department is committed to the development and implementation of a new, problem-driven, inquiry-based core program for majors. The new lower-division core courses are evolution and biodiversity, cellular basis of life, molecular biology and genetics, and physiological ecology. Successful candidates will join faculty teaching groups and contribute to the development and teaching of two of these courses and coordinate the associated laboratory activities. The Cell and Molecular Biologist will teach the second and third courses and the Integrative Biologist will teach the first and fourth courses in this series. Opportunities for collaborative research with other faculty in the department are available depending on the background and interests of the candidates. Applicants must have a Ph.D. with emphasis in either cell/molecular biology or integrative biology. Preference will be given to applicants who have demonstrated a strong commitment to teaching and the use of inquiry-based pedagogy

Applicants should send a curriculum vitae (including a history of grant support), a summary of teaching philosophy (including teaching experience in using inquiry-based pedagogy), related publications, and three letters of recommendation to: Chair, Cell and Molecular Biology Search Committee or Chair, Integrative Biology Search Committee, Department of Biological Science, California State University, Fullerton, P.O. Box 6850, Fullerton, CA 92834-6850. Website: http://biology.fullerton.edu/. Review of applicants will begin 15 January 1999 and continue until suitable candidates are appointed. Women and minority candidates are appointed. Women and minority candidates are appointed. Vomen and minority candidates are appointed.

RESEARCH ASSISTANT PROFESSOR UNIVERSITY OF PENNSYLVANIA

We are seeking a Physiologist to join a dynamic research program in epithelial transport. The project will involve the interaction between chloride channels, purinergic receptors, and the release of ATP in ocular epithelia. The applicant should have a Ph.D. in physiology and postdoctoral experience with patch-clamp techniques. Experience with RT-PCR, histochemistry, intracellular calcium measurements using fura-2, or ATP measurement would be advantageous.

The position will be for a period of three years and the successful applicant wil be expected to develop her/his own research program and apply for independent support. Applicants should submit a complete curriculum vitae (including the names and addresses of three references) to: Personnel Administrator, Department of Physiology, University of Pennsylvania, B400 Richards Building, Philadelphia, PA 19104-6085. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR AVIAN ECOLOGY

Tenure-track position for fall 1999. Teaching includes introductory zoology, and upper-level courses such as ecology and ornithology. Research involving undergraduates expected. Send curriculum vitae; statements of teaching and research interests; up to three reprints; and names, addresses, telephone numbers, and e-mail addresses of at least three references to: Dr. Sam Zeveloff, Chair, Department of Zoology, c/o Human Resource Department, Weber State University, Ogden, UT 84408-1016. Telephone: 801-626-6165; FAX: 801-626-7445; e-mail: szeveloff@weber.edu; website: http://catsis.weber.edu/zoology. Application deadline is January 21, 1999. Affirmative Action/Equal Opportunity Employer.



UNIVERSITY OF DUBLIN

TRINITY COLLEGE

THE SMURFIT CHAIR OF MEDICAL GENETICS (1989)

Applications are invited for the above position, which will be tenable from October 1999, or as soon as possible thereafter.

The appointee will have a demonstrated ability to establish within the Department of Genetics, a strong research programme on the scientific aspects of medical or human genetics and will contribute to teaching in the department. A medical degree is not required and a clinical appointment is not associated with this Chair.

Appointment will be made at an appropriate point of the professorial salary scale, currently IR£48,175 - IR£62,250.

Further particulars relating to this appointment may be obtained

Michael Gleeson Secretary to the College West Theatre **Trinity College** Dublin 2 Telephone: +353-1-608-2197/1722 / Facsimile: +353-1-671-0037 E-mail: domurphy@tcd.ie

to whom formal applications should be sent, to arrive before the preferred closing date - Friday 29 January 1999.

Information about the Genetics Department can be found at: http://acer.gen.tcd.ie/dept/gendept.html

Trinity College is an equal opportunities employer.

University



OF BRISTOL

in association with the MRC Centre in Synaptic Plasticity

Chair in Neuroscience

A world leader is sought for a Chair which has been created through the formation of a new MRC Centre at the University of Bristol. The focus of the Centre is the understanding of synaptic plasticity, particularly as it relates to learning & memory and neurodegeneration. It is based within the School of Medical Sciences which contains one of the largest neuroscience communities within Europe. The Centre employs a multidisciplinary approach, from chemistry and molecular biology, through cellular and systems analyses, to behaviour. It is expected that you would complement existing activities whilst contributing to the overall mission of the Centre. A generous space

a secured lectureship associated with this post. Please quote reference 5176. The closing date for applications is

Lectureships in Neuroscience

allocation in the heart of the Centre is available for you. There is also

Vacancies exist for up to three lectureships that have been created through the formation of a new MRC Centre at the University of Bristol. It is expected that you would complement existing activities whilst contributing to the overall mission of the Centre. Salary up to £29,048 per annum.

Please quote reference 5177. The closing date for applications is

Informal enquiries may be made to the Director of the MRC Centre, Professor G.L. Collingridge, E-Mail G.L.Collingridge@Bristol.ac.uk or telephone +44 (0) 117 928 7420.

For further details telephone (0117) 925 6450, minicom (0117) 928 8894 or E-Mail Recruitment@bris.ac.uk (stating postal address ONLY) quoting the appropriate reference number.

AN EQUAL OPPORTUNITIES EMPLOYER

GLOBAL OPPORTUNITIES

Lecturer **ZOOLOGY** AND TROPICAL **ECOLOGY**

School of Biological Sciences

Townsville

20°

22°

Propie of Capricorn (23.5'S)

26°

Ref No: JI98142

Reporting to the Head of the School of Biological Sciences (incorporating the divisions of Zoology and Tropical Ecology, Tropical Plant Sciences, Marine Biology and Aquaculture) the appointee will be required to teach in appropriate areas of zoology, ecology, evolution, and/or quantitative biology, including their area of special expertise, and to develop a research program within the general area of focus in the division.

research in whole animal biology and demonstrated experience and success in tertiary teaching and research, preferably including student supervision. Zoology and Tropical Ecology excels in winning competitive research grants in one of the University's pre-eminent schools. James Cook University is among the best universities in the tropics world-wide for research and teaching, with excellent facilities and ready access to a wide array of environments (rainforest, savanna, streams, swamps, mangroves, coral reefs, mountains and islands). The region also provides a rich intellectual environment, including CSIRO, Wet Tropics Management Authority, Australian Institute of Marine Science, Great Barrier Reef Marine Park Authority and several government departments. The University is a participant in four federally funded Cooperative Research Centres - Tropical Rainforest Ecology and Management, Sustainable Development of Tropical Savannas, Ecologically Sustainable Development of the Great Barrier Reef, and Aquaculture - which involve collaboration between universities, government agencies and industry.

[http://www.jcu.edu.au/dept/Zoology/homepage.html] Enquiries to Associate Professor Richard Pearson, phone +61 7 4781 4262 or e-mail: richard.pearson@jcu.edu.au

annum. Benefits include employer superannuation contribution and attractive options for salary packaging.

application procedures may be obtained by contacting the Recruitment Officer, Faculty of Science and Engineering, James Cook University, Townsville Qld 4811. Telephone +61 7 4781 6834, facsimile +61 7 4781 6844, e-mail Terri.Williamson@jcu.edu.au or the package maybe accessed on [http://www.jcu.edu.au/archives/staffrecruitment/maillist.html]

the reference number.

The University reserves the right to appoint by

Equal Opportunity in Employment is University Policy

Environment" Policy

JAMES COOK UNIVERSITY

20°

 22°

26°

Applicants must have a strong interest in teaching and

Further information may be accessed on

Tenure: Appointment will be on a continuing basis subject to a probationary period of up to three years.

Salary: Academic Level B - \$46,737 - \$55,301 per

Information packages including selection criteria and

Applications close on 11 December 1998. Please quote

invitation or not to make an appointment.

The University has a "Smoke-Free Working

STAFF SCIENTIST NEUROBIOLOGY

The Clinical Brain Disorders Branch of National Institute of Mental Health is seeking a Neurobiologist to study genetics aspects of neurobiological phenotypes that are associated with genetic susceptibility to schizophrenia. The incumbent is expected to work with Clinicians and basic scientists to develop a program to conduct genotyping and polymorphism studies for a variety of candidate genes. The successful candidate will be given a two- to five-year appointment as a Staff Scientist within the Intramural Research Program at an annual salary of \$60,000 to \$70,000. Candidates should have a minimum of eight years of relevant postdoctoral experience in schizophrenia research as evidenced by published work. Relevant skills for this position include nucleic acid (DNA, RNA) extraction and purification; direct gene analysis; PCR; RT-PCR; construction of cDNA libraries; mutational analysis by SSCP and heteroduplex HPLC; sequencing; primer design; restriction enzymatic reactions; and genotyping. Interested candidates should submit curriculum vitae/bibliography, résumé or optional OF-612 (Application for Federal Employment) to: Mollie P. Strotkamp, NIMH Personnel Office, Building 45, Room 3AN32, 9000 Rockville Pike, Bethesda, MD 20892 on or before December 11, 1998.

The National Institute of Mental Heatlh is an Equal Opportunity Employer.

The Department of Anthropology, University of Florida (UF) has two openings for BIOLOGICAL ANTHROPOLOGISTS, rank open. We seek superior applicants in molecular biology and physical anthropology with strong interdisciplinary interests. Department resources include a forensics laboratory and collaborative opportunities with expanding biological programs at UF. Applicants should have a strong background in quantitative analysis of morphology, physiology, or in human development within a broad evolutionary, ecological, and behavioral context. The UF anthropology program has 30 full-time faculty members, 170 graduate students, and is rated as one of the top programs in the country. Send a letter of application along with a curriculum vitae and the names, addresses, and telephone numbers of four references to: Chair, Biological Anthropology, University of Florida, P.O. Box 117305, Gainesville, FL 32611-7305. Deadline for application: December 17, 1998.

The University of Florida is an Equal Opportunity/Affirmative Action Employer. Women, minority candidates, and disabled scholars are particularly encouraged to apply.

A POSTDOCTORAL POSITION available in mouse core physiological laboratory. We seek individuals with broad background in cardiovascular physiology and pharmacology who have demonstrated research expertise in mouse model in vivo. The individual in this position will study cardiac function and molecular mechanism of cocaine cardiotoxicity in a murine model. Molecular biology and histopathology experience is required. Please send a curriculum vitae and three references to: James P. Morgan, M.D., Ph.D., Chief of Cardiovascular Division, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215. An Equal Opportunity and Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of constriction and dilation of cerebral and coronary resistance arteries. Projects focus on the roles of ion channels and endogenous ligands in control of vascular tone using patch clamp, fluorometric, and tissue bath techniques. Send curriculum vitae, brief statement of interests, and names of three references to: Joseph Brayden, Ph.D., Department of Pharmacology, University of Vermont College of Medicine, Burlington, VT 05405. E-mail: brayden@salus.med.uvm.edu. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TWO POSITIONS IN MOLECULAR BIOLOGY UNIVERSITY OF WISCONSIN-PARKSIDE

The Biological Sciences Department is recruiting two broadly trained Molecular Biologists desiring a balance of research and teaching beginning in the fall of 1999. Candidates must have (1) a Ph.D. with postdoctoral experience; (2) a commitment to good teaching at both the graduate and undergraduate levels; (3) the ability to conduct significant and independent research as judged by publications.

Teaching assignments may include graduate and upper-division undergraduate courses, laboratory modules in molecular biology techniques, and/or introductory courses for majors and non-majors.

The University of Wisconsin–Parkside is located in the Chicago-Milwaukee corridor. The department offers degrees in biological sciences, molecular biology, and an M.S. in applied molecular biology.

Applications should include a curriculum vitae, reprints, description of research interests, a statement of teaching philosophy, and the names, telephone, and email addresses of three references to: Carmel Ruffolo, Chair, Search Committee, Department of Biological Sciences, University of Wisconsin-Parkside, Kenosha, WI 53141. Additional information can be obtained by e-mail: carmel.ruffolo@uwp.edu; Telephone: 414-595-2327. Information about the department can be accessed at website: http://www.uwp.edu/academic/biology.

Deadline for Applications is January 22nd, 1999

The University of Wisconsin-Parkside is an Affirmative Action/ Equal Employment Opportunity Employer. Women, minorities, dual career couples, veterans, and persons with disability are encouraged to apply.

HIV RESEARCH

POSTDOCTORAL POSITION available immediately in well-equipped NIH-funded laboratory studying HIV pathogenesis. Projects focus on the molecular determinants of HIV disease progression. Seeking individual trained in molecular virology. Experience in DNA sequence analysis and PCR preferred. The Wadsworth Center houses the graduate program of the Department of Biomedical Sciences of SUNY, Albany. Position compensated through Health Research, Inc. Send curriculum vitae with references to: Dr. H. Burger and Dr. B. Weiser, Wadsworth Center, New York State Department of Health, P.O. Box 22002, Albany, NY 12201. Affirmative Action/Equal Employment Opportunity.

POSTDOCTORAL/RESEARCH ASSOCIATE IN SKIN/SKIN APPENDAGE DEVELOPMENT

To study mechanisms of epithelial-mesenchymal interactions in feather/hair patterning/morphogenesis. Must be proficient in molecular biology. Website: www-hsc.usc.edu/~cmchuong. Send curriculum vitae, goals, and three references to: Dr. Cheng-Ming Chuong, Department of Pathology, University of Southern California, Los Angeles, CA 90033. FAX: 323-442-3049; e-mail: cmchuong@zygote.hsc.usc.edu.

POSTDOCTORAL POSITION available to study function and mechanism of transformation of the Lbc oncogene, which is a multidomain regulator of the small GTP-binding protein Rho, and characterize novel interacting proteins. The position requires cell/molecular biology or biochemistry experience. Candidates must have Ph.D. and be U.S. citizens/permanent residents to qualify for three-year position. Please send curriculum vitae to: Dr. D. Toksoz, Department of Cell and Molecular Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. Telephone: 617-636-6719; FAX: 617-636-0445; e-mail: dtoksoz@infonet.tufts.edu. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCHER. Pathophysiology and causative factors in Kawasaki disease. Requires: M.D.; two years of experience in immunology and clinical and treatment aspects of Kawasaki disease, including cytokine responses, endothelial activation, and vascular reactivity; strong publication record; employment authorization in the United States. \$30,000 per year. Send a curriculum vitae and the names of three references to: Dr. John Zabriskie, Founders Hall, Rockefeller University, New York, NY 10021.

POSITIONS OPEN

AQUATIC ECOLOGIST

The Academy of Natural Sciences' Estuarine Research Center invites applicants for a research position in estua-rine ecology at the ASSISTANT CURATOR level. We are seeking a Ph.D. in ecology, environmental biology, or other relevant discipline, with research interests in (1) physiological ecology (physiological or toxicological mechanisms controlling trophic interactions), and (2) plankton ecology (food web dynamics, or carbon and nutrient cycling). The candidate should have postdoctoral experience complementing our strengths in metal and nutrient biogeochemistry, estuarine food webs, and population and community ecology, with an interest in developing a research focus in estuarine systems, and is expected to establish an externally funded research program. The Center is located 40 miles southeast of Washington, D.C. in a new research facility on the Patuxent River, a subestuary of Chesapeake Bay. Applications received by 1 February 1999 will receive full consideration. Submit curriculum vitae, letter stating research and career goals, and names, addresses, telephone numbers, and e-mail of three references to: Assistant Curator #669, Academy of Natural Sciences, 10545 Mackall Road, St. Leonard, MD 20685. Affirmative Action/Equal Opportunity Employer

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

RESEARCH PLANT MOLECULAR GENETI-CIST position, Plant Gene Expression Center, Albany, California. The Center consists of a consortium of Agricultural Research Service (ARS) and University of California-Berkeley (UCB) scientists. Successful applicant will conduct basic research in plant molecular biology/plant genomics. Ph.D. in plant genetics or molecular biology is highly desired. Demonstrated ability to design, conduct, and communicate research in plant genetics is required. The applicant will be considered for appointment as an Adjunct Professor by the Department of Plant and Microbial Biology-UCB. Must be U.S. citizen. Salary (\$58,468 to 89,817, GS-13-14) based on qualifications and experience. For information on the research program and/or position contact: Dr. Barbara Baker, Tele-phone: 510-559-5900; e-mail: bbaker@socrates. berkeley.edu. For general information on application procedures and forms contact: Area Personnel Office, Telephone: 510-559-6014. Applications must be post-marked by January 25, 1999. USDA is an Equal Opportunity Provider and Employer

PROTEIN EXPRESSION

NSF-funded RESEARCH ASSOCIATE position available for Ph.D. Molecular Biologist experienced with eukaryotic protein expression systems, to join ongoing work on structure and function of large respiratory pricins. Opportunity to learn biophysical techniques, including analytical ultracentrifugation. Apply by January 15, 1999, to: Dr. Karen I. Miller, Department of Biochemistry and Biophysics, ALS 2011, Oregon State University, Corvallis, OR 97331. Telephone: 541-737-2264; FAX: 541-737-0481; e-mail: millerka@ucs.orst.edu.

OSU is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual career couples.

RESEARCH ASSOCIATE

NIH-funded Research Associate position to study the biochemical functions of the MLL fusion partners AF4 and AF9. This work is part of a program project on therapy-related leukemias with extensive collaborative interactions at the University. Experience in the analysis of protein interactions desirable. Send curriculum vitae and cover letter to: Peter H. Domer, M.D., Director of Diagnostic Molecular Biology, University of Chicago, 5841 South Maryland Avenue, MC 0003, Chicago, IL 60637.

Pharmacology. LAW CLERK. Exciting opportunity for a Ph.D. in pharmacology to apprentice with Reston, Virginia intellectual property firm. Strong writing, communication, and computer skills required. Join a firm where excellence is the norm! Respond to: Law Clerk, Greenblum & Bernstein, P.L.C., P.O. Box 2610, Reston, VA 20191. Visit our website: http://www.gbpatent.com.

Marmaceuticals

University of Canterbury Christchurch - New Zealand

Lecturer in Zoology

Applications are invited for the tenured position of Lecturer (equivalent to US Assistant Professor) in the subject area of Terrestrial Ecology in the Department of Zoology. Preference may be given to applicants with experience in insect ecology although applications from scientists with expertise in other areas will be considered. The minimum qualification on appointment is the Ph.D. degree or equivalent, although candidates with postdoctoral experience are likely to be preferred. The appointee will be expected to contribute to courses in general zoology and in ecology at undergraduate level and to teach at postgraduate level in his or her area of specialisation. The appointee will be required to develop an active programme of research and to supervise postgraduate students.

For full details contact:

<hr.acad.appts@regy.canterbury.ac.nz>.
Information about the University may be
accessed at: <www.canterbury.ac.nz>.
Applications, quoting Position No.

Applications, quoting Position No. ZO29, close on 15 January 1999 and must be airmailed to the Registrar, Attention Human Resources Section, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.

The University has a policy of equality of opportunity in employment.

EUROPEAN OPPORTUNITIES

TRAVELLING FELLOWSHIPS HELENE HARRIS MEMORIAL TRUST

Ovarian Cancer Forum - Stockholm 1999

The Helene Harris Memorial Trust (HHMT) has organized biennial international scientific meetings to advance research into ovarian cancer for the last decade. These meetings are now established as a key forum for both clinical and basic science research aspects of ovarian cancer. The next forum will be held in the Karolinska Hospital in Stockholm from April 18th – 21st, 1999.

Participation at previous HHMT meetings has been by invitation on the basis of reputation and research contribution. In order to broaden the scope of participants and to provide the opportunity for presentation of recent and novel advances, the HHMT trustees are offering a number of competitive fellowships for 15-minute presentations at the next forum. The fellowships will include travel expenses to Stockholm and accommodation for the full duration of the forum.

Applications are now invited for these travelling fellowships, which will be selected by peer review and can involve any aspect of basic science or clinical research related to ovarian cancer. Applicants should submit an abstract describing the background, methodology, and results of their original research of no more than 1,000 words. The closing date for applications is January 10, 1999, and applicants will be notified of the outcome by February 1, 1999 The successful applicants will be expected to attend and participate in the entire HHMT meeting. Applications should be sent to HHMT, Harvard House, 14-16 Thames Road, Barking, Essex IG11 OHX England, UK (fax: +44 (0)-181-594-9845)

Roche

Position for Laboratory Head in Preclinical CNS Research

Who we are

The preclinical CNS research department at F. Hoffmann-La Roche Ltd in Basel, Switzerland, is dedicated to discovering new medicines of real benefit to today's and tomorrow's sufferers of major CNS diseases.

The position

Head of a cellular neurobiology laboratory working in neurodegenerative disease research. Work at the laboratory focuses on the use of modern imaging techniques to measure changes in intracellular ion concentration and intracellular organelle structure and function. The laboratory is also responsible for evaluating neuroprotective mechanisms and approaches using *in vitro* cytotoxicity assays.

Who you are

You have a PhD in biological, pharmaceutical, or medical science and a broad background in neurobiology. Experience with primary neuronal cell culture and cellular imaging techniques is a prerequisite. You have a proven track record of independent and innovative research, as reflected by publications, and you are able to work well in a multidisciplinary team. You are fluent in English and have the appropriate computer experience for the position.

Who to contact

If the above profile fits your background and experience, and if you are interested in this challenging position, then please send your application with full supporting documentation to: F. Hoffmann-La Roche Ltd, Mr Werner Aschwanden, PSPB, 52/205, CH-4070 Basel, Switzerland, quoting reference: As1117. For further information, please contact Dr John A. Kemp by e-mail at john.kemp@roche.com.

Two CYTOGENETIC TECHNOLOGISTS. \$32,446 per year, 40 hours per week, 8 a.m. to 5 p.m. Santa Fe, New Mexico.

(1) Routine and complex cytogenetic duties. Apply multiple FISH hybridization protocols involving interphase and metaphase sample preparations. Analysis of microdeletions, structural rearrangements, interphase aneuploidy, and marker identification by FISH. Photomicrography and imaging. Specimen harvesting, karyology, notation of observed results, probe quality control. B.S. in biology, biochemistry, or medical technology required, plus two years of experience in job offered, plus NCA certification as Clinical Laboratory Specialist in cytogenetics. JO# 0426719.

(2) Responsible for preparing, harvesting, examining, and analyzing chromosomes found in amniotic fluid, bone marrow, blood, and tissue to aid in diagnosis and treatment of genetic diseases. Includes selecting and dissecting suitable tissue, microscopy, karyology, imaging of specimens, primary responsibility for amniotic fluids set up, tissue culture and harvest selection, routine banding of specimen types, and notation of observed anomalies. B.S. in biology, medical technology, or genetics required, plus two years of experience in job offered, plus NCA certification as Clinical Laboratory Specialist in cytogenetics. JO# 0426718.

Résumés to: Charles Pacheco, New Mexico Department of Labor, 301 West DeVargas, Santa Fe, NM 87501, Indicate IO#.

The Laboratory of Dr. Richard J. Santen seeks a RE-SEARCH ASSOCIATE to be involved with study of the hormonal regulation of breast cancer. Specific aspects of the position include use of immunohistochemical techniques to identify estrogen receptor, progesterone receptor, markers of cell proliferation, and oncogenes in tissue; transfections of cultured cells; analysis of transcription. RNA message formation, and products of translation via Western blotting; and studies with human tumors implanted as xenografts. The individual hired will review medical literature, design experiments, present results at national and international meetings, and public in peerreviewed journals. Qualifications are M.D. or Ph.D. Submit curriculum vitae and three letters of reference to: Richard J. Santen, M.D. Professor of Medicine, University of Virginia Health Sciences Center, Department of Internal Medicine, Box 334, Charlottesville, VA 22908. You may Telephone: 804-924-2961 for further information. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR/TUNA-DOLPHIN RESEARCH ONE PERMANENT POSITION National Oceanic and Atmospheric Administration San Diego (La Jolla)

The Southwest Fisheries Science Center, a National Oceanic and Atmospheric Administration (NOAA) research facility, invites applications for a Research Director for tuna-dolphin investigations related to recent passage of the International Dolphin Conservation Program Act. This senior-level position will assume responsibility for research program design and interpretation related to determining whether fishery-related stress is having a significant adverse impact on dolphin stocks in the eastern tropical Pacific Ocean. U.S. citizenship required. Salary 566,551 to \$101,773. Announcement number W/NMF/990006.BS closes December 18, 1998; for details see website: http://www.usajobs.opm.gov/a9noaa.htm; Telephone: 206-526-6294. An Equal Opportunity and Affirmative Action Employer.

The Surgical Neurology Branch of the National Institute of Neurological Disorders and Stroke, NIH, Bethesda, Maryland is recruiting a HISTOPATHOLOGY TECHNICIAN to perform tissue culture, paraffin, frozen, and gross sectioning, EM fixation, *in situ* hybridization, and immunohistochemical staining. Applicants require two full years of progressively higher-level graduate education directly related to the duties of a Histopathology Technician or a minimum of 52 weeks of experience that is equivalent in scope and level of responsibility to work as a Histopathology Technician at the next lower level with the Federal Service. Applicants will be further evaluated on their knowledge, skills, and ability to perform the duties of the position. Salary is at the GS-09 level (\$32,457 to \$42,198).

Please mail or FAX résumé to: Christina Contreras, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540. FAX: 301-402-2818. NIH is an Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR, CENTER OF EXCELLENCE IN MATH AND SCIENCE EDUCATION BLACK HILLS STATE UNIVERSITY

Applications for the Director of the Center are invited. The position will begin July 1999 with salary, rank, and tenure status depending on qualifications and experience. Responsibilities include developing models for science/ math education and research, teaching undergraduate and graduate courses in math or science education, writing and administering grants, being a catalyst for scholarly research presentations and publications from the Center. and promoting effective use of technology for science/ math education. Science/math educators with a Doctorate and strong credentials in collaborative work with a College of Education and undergraduate research are encouraged to apply. Familiarity with the K-12 setting is desired. Send a letter of application, curriculum vitae, vision statement with regard to creating a nationally recognized Center, statement of research interests, and three letters of reference to: c/o Dr. Dan O. Farrington, Search Committee Center of Excellence, Black Hills State University, 1200 University Avenue, Spearfish, SD 57799-9504. Screening will begin January 15, 1999 Applications will be accepted until the position is filled Location: BHSU is a comprehensive, regional institution located in Spearfish, South Dakota with a current enrollment of 2,800 students at the main campus and another 1,000 sudents at a Rapid City, South Dakota branch campus. The University's northern Black Hills location provides the ideal environment for combining outdoor recreational and collegiate educational opportunities in a small-town setting.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION AIRWAY NEUROBIOLOGY

A Postdoctoral/Research Associate position is available immediately to join a research team investigating neurogenic mechanisms of bronchial hyperreactivity caused by airway mucosal inflammation. Ongoing studies focus on the physiological and pharmacological properties of nociceptive nerve endings in the lungs. Intracellular recording techniques will be applied to study the transduction mechanisms involved in the activation of cultured pulmonary sensory neurons by various endogenous inflammatory mediators. Background in neurophysiology, cell biology, and/or pulmonary physiology is desirable. Salary competitive and commensurate with experience. Applications accepted until position filled. Please send résumé and two letters of reference to: Dr. L. Y. Lee, Professor, Department of Physiology, University of Kentucky Medical Center, Lexington, KY 40536-0298 USA. Telephone: 606-323-6339; FAX: 606-323-1070; email: lylee@pop.uky.edu.

Two POSTDOCTORAL POSITIONS in microbial pathogenesis are available to investigate virulence mechanisms of Haemophilus ducreyi, the etiologic agent of chancroid and a cofactor in transmission of HIV infection. Emphasis will be placed on characterization of H. ducreyi gene products involved in the regulation of expression of virulence factors, especially toxins (see: PNAS 94:4056, 1997). Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Positions include salary, fringe benefits, and the opportunity to work in a dynamic research environment. First position available after January 1, 1999. Second position available after June 1, 1999. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw. swmed.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for a Molecular Biologist to study molecular mechanisms of resistance to anti-cancer agents in cancer cells. Recent Ph.D. plus significant experience in molecular biology required Mail/FAX curriculum vitae with three references to: A. R. Safa, Ph.D., Department of Experimental Oncology, Hollings Cancer Center, Medical University of South Carolina, 86 Jonathan Lucas Street, P.O. Box 250955, Charleston, SC 29425. FAX: 843-792-3200

POSITIONS OPEN

STAFF SCIENTIST

The H. Lee Moffitt Cancer Center and Research Institute, an NCI-designated facility located on the Tampa campus of the University of South Florida, is seeking a Staff Scientist to analyze basic science and clinical research specimens for gene expression utilizing high-density microarray technology. Responsibilities include managing microarray facility, obtaining samples, optimizing and characterizing procedures for nucleic acid extraction, amplification, labeling, fragmentation, and hybridization. In addition, this position will provide technical expertise for experimental design, troubleshooting, and analyzing results. Duties specifically relating to analysis will include validating the quality of data obtained for individual experiments, assisting with the utilization of publicly available databases to further the goals of research projects, and assisting in the development of annotated databases from data obtained locally. Qualifications include a Ph.D. in biochemistry, biophysics, genetics, or molecular biology and a minimum of three years of relevant experience with DNA/RNA and standard molecular biology procedures and concepts, specifically those relating to responsibilities listed above. Must have strong analytical/computation skills, and an understanding of biological macromolecules. Excellent communication skills a must.

FAX résumé to: FAX: 813-979-3032 or apply to: Human Resources, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612. To visit our website: http://www.moffitt.usf.edu. A drug-free workplace. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE HARVARD MEDICAL SCHOOL

Positions are available to study skeletal muscle and neuronal nicotinic acetylcholine receptors (AChRs). Projects include (1) structural studies (affinity labeling, protein chemistry, spectroscopy); (2) functional properties of mutant AChRs expressed in oocytes or cell lines. Experience in membrane biochemistry/protein chemistry and/or cell electrophysiology required. Send curriculum vitae with the names and addresses of three references to: Dr. Jonathan B. Cohen, Department of Neurobiology, Harvard Medical School, 220 Longwood Avenue, Boston, MA 02115.

Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA, IRVINE

A POSTDOCTORAL POSITION is available immediately to study filamentous development in medically relevant yeast (Science 262:1741–1744, 1993; Science 266: 1723–1726, 1994). Research projects include MAP kinase-mediated signal transduction, transcriptional regulation, cell cycle regulation of morphogenesis. Experience with molecular and cell biology is essential. Competitive compensation. Send curriculum vitae and names of three references to: Dr. Haoping Liu, Department of Biological Chemistry, College of Medicine, University of California at Irvine, Irvine, CA 92697-1700. FAX: 949-824-2688; e-mail: h4liu@uci.edu.

University of California, Irvine is committed to excellence through diversity.

SELENIUM BIOCHEMISTRY THRESSA STADTMAN, PH.D. ENTRY ID: PD-827

A POSTDOCTORAL POSITION is available in the Laboratory of Biochemistry of the National Heart, Lung, and Blood Institute specializing in selenium biochemistry. Applicants must have a Ph.D. and less than five years of postdoctoral experience. U.S. citizen or permanent resident required. Laboratory of Biochemistry, NHLBI, 3 Center Drive, MSC 0320, Building 3, Room 108, Bethesda, MD 20892-0320.

NEUROBIOLOGIST RESEARCH ASSOCIATE position is immediately available for a Ph.D.-level scientist to work on the effects of neurogenic CGRP on muscle AChE molecular forms. Candidates should have experience in biochemical and molecular biological methodologies, and U.S. citizenship. Please send curriculum vitae, relevant reprints, and names of three references to: Dr. Hugo L. Fernandez, Research and Development (151), VA Medical Center, P.O. Box 5005, Bay Pines, FL 33744.

The Bay Pines VA Medical Center is an Equal Opportunity Employer. Direct and drive scientific success through strategic vision as:

Head of Medicinal Chemistry

£ Negotiable + car

UK based

This post offers an excellent opportunity to advance your career within a major multi-national pharmaceutical company currently investing in major programmes of expansion. Reporting to the Director of Research within a thriving, innovative, discovery-based environment incorporating state-of-the art facilities, you will:

- provide scientific leadership and direction, promoting excellence in programmes of Medicinal Chemistry and achievement of drug discovery research project goals
- develop, recruit and build upon existing teams of high calibre Medicinal Chemists
- make a major contribution to strategic planning and project/programme review within the international organisation
- identify and establish major third party collaborations that extend and develop the company's scientific expertise

Qualified to PhD level, you will have gained several years' experience successfully managing your own Group/Section within the Pharmaceutical Industry. Well-versed in modern computational, combinatorial and medicinal chemistry approaches to the design and discovery of new active molecules, you will have the ability, drive and commitment necessary to make a major impact on drug discovery research. Your outstanding record of innovation and achievement, exemplified by publications and/or patents, strong leadership and influencing skills will give you the credibility essential to succeed in this important, challenging role.

If you would like to discuss this post in confidence then please contact Dr Michelle Richards, who is advising, or send your CV and publication list to the address below, quoting Ref: 98156S. Closing date December 21st 1998.



Roger Stephens & Associates

Chequers House, 1 Park Street, Old Hatfield, Herts AL9 5AT Telephone: +44(0)1707 259333/275361 Fax: +44(0)1707 271366 e-mail: ndstephens@aol.com http://www.pharmarecruit.com



MAX-PLANCK-INSTITUTE

for Biogeochemistry POB 10 01 64, D-07701, Jena, Germany

We are advertising with starting 1st January 1999 or later

4 Scientists positions and Postdoctoral Opportunities in EARTH SYSTEM SCIENCE

Our members pursue research in interdisciplinary Earth System Science emphasizing the following areas: process-oriented biogeochemistry, global biogeochemical cycles, earth system observations and remote sensing, emphasizing integration of modeling with experimental studies. Trace gas and hydrological fluxes are of special interest and facilities exist for micrometeorological and trace gas measurements.

Scientist positions require fluent English, hands-on experience in the applicants area of specialization and broad interests in biogeochemistry. 3 scientists: able to combine modeling and measurements in the areas of bio-atmospheric chemistry, global biogeochemical cycles, and earth system observations and system models. 1 scientist: willing to both lead biogeochemical model development and provide support and maintenance for biogeochemical models used by the group, also will be supported by programming staff.

Postdoctoral positions (stipendiate positions for two years, available immediately) are available for biogeochemical research on trace gases, carbon cycling, land use change, ecosystem modeling, climate change and ecosystem response, remote sensing and basic biogeochemical process research. Experimentalists and modelers are encouraged to apply.

All applications should be sent to Prof. Schimel until 15.12.1998.

A major
European
pharmaceutical
company wishes
to recruit for its
Research Centre
located
west of Paris

SCIENTIST cardiovascular pharmacology

Involved in research projects aiming at the discovery of novel drugs, you will manage a small team and be more particularly responsible for research program on hemodynamic technics and will perform in vivo models, specially myocardial ischemia.

Qualifications include a PhD with postdoctoral experience in cardiovascular research. Applicants should have a practical experience of operative technics.

Our material and technical facilities are excellent. You will join a high-level multidisciplinary team and evolve in a stimulating scientific environment.

Please send your application file (CV, handwritten letter and photo) to **PUBLIVAL/6011B**27 route des Gardes - 92190 MEUDON (FRANCE)

FULL-TIME, TENURE-TRACK POSITION ASSISTANT PROFESSOR OF BIOLOGY POPULATION GENETICIST

The University of Maine at Machias invites applications for a full-time, tenure-track position beginning August 30, 1999. We seek a Population Geneticist committed to undergraduate teaching. The successful candidate will teach genetics, evolution, conservation biology, a course in an organismal group of his/her specialty, and other courses supporting our biology and environmental studies degree programs. We seek an individual with expertise that can be applied to marine systems and with field biology and conservation/environmental interest. In addition to a full-time teaching load, this person is expected to work with and supervise students on undergraduate research projects and senior theses. Applicants must have a Ph.D. by August 30, 1999, should be able to demonstrate teaching excellence and an ability to teach in highly interactive formats as well as incorporate new technologies in their teaching. Applicants should have a demonstrated ability to teach/mentor students with a variety of backgrounds and ages, a commitment to interdisciplinary teaching, an interest in issues of pluralism and gender, and a willingess to contribute to the rapidly growing Division

Send letter of application, detailed curriculum vitae, e-mail address, transcripts, and three letters of reference by February 5, 1999, to:

Dr. Brian F. Beal, Chair Biology Search Committee Equal Employment Opportunity Office University of Maine at Machias 9 O'Brien Avenue Machias, ME 04654 Telephone: 207-255-1349 E-mail: bbeal@acad.umm.maine.edu

Equal Employment Opportunity/Affirmative Action.

ASSISTANT/ASSOCIATE PROFESSORS PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology at the University of Louisville School of Medicine invites applications and nominations for tenure-track Assistant or Associate Professor faculty positions. The selected candidates will have a Ph.D. in pharmacology, toxicology, or related discipline, and be expected to transfer or develop a nationally recognized and independently funded research program that incorporates molecular approaches to pharmacology and/or toxicology research. The University of Louisville Health Sciences Center has established interdisciplinary research centers of excellence in genetics and molecular medicine, cancer, neuroscience, and environmental health science. Applicants with research interests in one or more of these areas are particularly encouraged to apply. The primary responsibilities will be in research and research training.

New research laboratories and competitive research start-up packages are available. Applicants should send a letter outlining career research goals, curriculum vitae, and the names of three individuals who can be contacted for letters of reference to: David W. Hein, Chairman, Department of Pharmacology and Toxicology, University of Louisville School of Medicine, Louisville, KY 40292.

Applications should be received by February 1, 1999, for full consideration, but the application process will continue until the positions are filled. For further information please visit our website: www.louisville.edu/medschool/pharmacology. The University of Louisville is an Affimative Action/Equal Opportunity Employer. Women and minorities are particularly encouraged to apply.

ASSISTANT to FULL PROFESSOR. Behavioral Medicine Division, Wayne State University School of Medicine, Department of Psychiatry and Behavioral Neurosciences. Ph.D. or M.D. with strong research record sought to conduct independent and collaborative research in cardiovascular psychophysiology, genetics, hormones and vascular function, menopause, or related areas. Demonstrated funding ability required. Send curriculum vitae, reprints, and statement of research interests to:

Robert R. Freedman, Ph.D., Professor and Director,

275 East Hancock, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR. University of Miami Marine and Freshwater Biomedical Sciences Center. Position available on or about July 1999 for National Institute of Environmental Health Sciences-supported center. Now in its eighth year, the Center boasts an international reputation in marine environmental health sciences and operates core resources, a postdoctoral training program, a seminar series, and an international outreach program. The Director will be expected to maintain an independent research program as well as to administer collaborative Center programs involving a diverse faculty from several departments and schools of the university. The successful candidate will have a history of NIEHS or broader NIH funding, be qualified for appointment at the rank of Pro-fessor in the Division of Marine Biology and Fisheries (with secondary/joint appointment in a relevant department of the School of Medicine), and have administrative experience commensurate with the position. Areas of research interest should be compatible with the mission of NIEHS including, but not limited to, environmental (aquatic), toxicology, environmental genomics, environmental biochemistry, and marine toxins/natural products. Applicants should send curriculum vitae, names of three references, funding history, and statement of interest to: Dr. Patrick J. Walsh, Marine and Freshwater Biomedical Sciences Center Search Committee, University of Miami Rosenstiel School, 4600 Ricken-backer Causeway, Miami, FL 33149. Search committee will begin deliberations on 4 January 1999 and continue until the position is filled.

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE position. Department of Physiology, East Carolina University School of Medicine. Research Associate sought for a funded training position to study mechanisms regulating initial hyperplasia and regulation of vascular tone in veins used as coronary artery bypass grafts. Applicants should have a Ph.D. and/or M.D., and a strong research background in vascular physiology. Ideal candidate will have expertise in RT-PCR, immunohistochemical staining, Northern and Western blotting, and primary culture of vascular smooth muscle cells. Working experience with large animal surgery an asset. Experimental work will be based primarily in physiology/cardiac surgery laboratories within a developing interdisciplinary Cardiovascular Research Institute involving Investigators from biochemistry, pharmacology, cardiology, pathology, and comparative medicine.

Position is available beginning December 1, 1998. Review of applications will begin immediately and continue until position is filled. Interested applicants should forward a curriculum vitae, a summary of research experience and goals, and the names of at least two individuals willing to submit letters of reference to: Robert M. Lust, Ph.D., Chairman, Department of Physiology Research Director, Cardiovascular Center, East Carolina University School of Medicine Brody Medical Sciences Building, Room 6N98, Greenville, NC 27858-4354.

East Carolina University is a member of the University of North Carolina System and is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study the requirements for maintenance of T cell self-tolerance. Molecular/cellular/transgenic approaches utilized to understand thymic development and establishment of peripheral tolerance. Related projects examine the MHC requirements for the development of diabetes. Training in cellular/molecular immunology/transgenic mouse experience preferred. Send curriculum vitae and three references to: Terri Laufer, M.D., Division of Rheumatology, 913 Stellar Chance, University of Pennsylvania, Philadelphia, PA 19104. E-mail: tlaufer@mail. med.upenn.edu; FAX: 215-349-5572. The University of Pennsylvania is an Equal Opportunity Employer and is actively recruiting minorities.

POSTDOCTORAL POSITION available immediately for NIH-funded project to study the mechanisms of store-coupled calcium entry in central neurons using patch clamp, single-cell photometry, and flash photolysis of caged compounds. Ph.D. or equivalent degree and previous experience with electrophysiological methods required. Send curriculum vitae and names of two to three references to: Dr. J. B. Lansman, Department of Cellular and Molecular Pharmacology, School of Medicine, University of California, San Francisco, CA 94143-0450. E-mail: jeffl@itsa.ucsf.edu.

POSITIONS OPEN

ECOLOGICAL MODELING

Two (2) POSTDOCTORAL RESEARCH positions and two (2) GRADUATE RESEARCH ASSISTANT-SHIPS are available immediately with the following expertise:

Simulation Modeler of forest ecosystems. The Postdoctoral Fellow will conduct modeling studies in association with the Duke University Forest Free Air CO₂ Enrichment (FACE) program. The individual will have responsibility for (1) integrating experimental results into comprehensive models, (2) predicting dynamics of carbon, nutrients, and water in forest ecosystems, and (3) linking ecosystem modeling with regional and global studies. Mathematical Ecologist. We are looking for a Postdoc-

Mathematical Ecologist. We are looking for a Postdoctoral Fellow with mathematic and statistical skills in combination with ecology training. The major responsibility to develop innovative methods for deconvolution analysis of experimental data from FACE experiments in order to predict ecosystem responses to a gradual increase in atmospheric CO_2 in the natural world.

Graduate Assistantships encourage both experimental and modeling studies on a broader range of ecological issues. To apply, send letter of application indicating areas of research interest and qualifications, current curriculum vitae, research publications, and names, addresses, and telephone numbers of at least three professional references to: Dr. Yiqi Luo, Department of Botany and Microbiology, University of Oklahoma, Norman, OK 73019. E-mail: yluo@ou.edu. Applications will be received until the positions are filled. Information on the department is on our website: http://www.ou.edu/cas/botany-micro. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer. Applications from women and underrepresented minorities are encouraged.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION

Studies involve the molecular biology and electrophysiology of NA+ Bicarbonate Cotransporters (NBCs), expressed in Xenopus oocytes. See: Nature 387:409, 1997; Am. J. Physiol. 274:F425, 1998. We use electrodes to voltage clamp and measure intracellular ion concentrations (pH, Cl-, K+, Na+). Current NBC projects: (a) genetics/gene structure, (b) physiology and localization, (c) second messenger regulation, (d) cloning/expression of new HCO₃ transporters, and (e) chimeric transporter construction/function. Studies will allow better understanding of NBCs' role in the kidney, pancreas, prostate, brain, etc. in normal and pathologic states. Molecular biology or electrophysiology experience is preferred. Send curriculum vitae and three references to: Dr. Michael F. Romero, Department of Physiology and Biophysics, Case Western Reserve University, 2119 Abington Road, Clevcland, OH 44106-4790. E-mail: mfr2@po. cwru.edu; FAX: 216-368-3952. CWRU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION NEUROBIOLOGY OF PSYCHIATRIC DISORDERS

A Postdoctoral position is available to study the postmortem neurochemistry of monoamine and neuropepide systems involved in the pathophysiology of neuropsychiatric disorders. Highly motivated individuals with a Ph.D. or M.D.-Ph.D. and a background in one of the following disciplines: neuroscience, biological psychiatry, or molecular biology are encouraged to apply. Send curriculum vitae, summary of research interests and experience, and names of three references to: Mark Austin, Ph.D., W1645 Biomedical Science Tower, University of Pittsburgh, Pittsburgh, PA 15213. E-mail: austin@cortex.psychiatry.pitt.edu.

CYSTIC FIBROSIS RESEARCH

POSTDOCTORAL POSITION available immediately in a laboratory studying cystic fibrosis. Ongoing studies include determining the mechanisms by which CFTR regulates other ion transporters in the cell membrane by protein-protein interactions using molecular/biochemical techniques. Candidates must be a U.S. citizen or permanent resident to qualify. Contact: Douglas M. Jefferson, Ph.D., Tufts University School of Medicine, Department of Cellular and Molecular Physiology, 136 Harrison Avenue, Boston, MA 02111. FAX: 617-249-0888; e-mail: douglas.jefferson@es.nemc.org. An Equal Opportunity/Affirmative Action Employer.

Research Scientist -Genetic Analysis

Astra is a pharmaceutical company in a phase of rapid growth. The company's operations, which are highly international, consists of research, production and marketing of pharmaceuticals through subsidiaries, agents and licensees all over the world. The number of employees is about 22 000 of whom 7 300 are in Sweden. Sales in 1997 amounted to SEK 45 billion and earnings totaled SEK 14.3 billion.

ASTRA DRACO AB

Astra Draco, a research and development company within the Astra Group, is engaged in R&D primarily in asthma and other inflammatory conditions.

Astra Draco employs about 1 000 people and is located in Lund in the south of Sweden, 20 km from Malmö.

Astra has, in collaboration with Millennium Pharmaceuticals Inc., established a vigorous and world leading research program within asthma genetics, with several studies well advanced. The major target of the genetics program is to identify candidate genes predisposing to the disease. We are looking for a scientist to join this exciting part of the research program. The postholder will be based within the expanding Genetics & Bioinformatics section of the Cell- and Molecular Biology Department at Astra Draco.

The main responsibility will be to plan and carry out appropriate computer-based analyses aimed at identification and characterisation of candidate genes and loci in human genetics studies and animal model systems.

Applicants should have a PhD in a relevant discipline such as statistical or molecular genetics, biostatistics, bioinformatics, medical epidemiology or molecular biology, together with experience of statistical genetic analysis. Experience of QTL mapping and/or sib-pair analysis would be particularly welcome. Experience within human or mammalian genetics and experience of working within a positional cloning project are also desirable.

The successful candidate will be able to work in a projectoriented environment as an independent scientist within an interdisciplinary project group of scientists from relevant preclinical, clinical and statistical disciplines. The position will provide a dynamic and stimulating environment and the opportunity to collaborate with different parts of the research organisation, as well as with international collaborators.

Further information about the position can be obtained from Hugh Salter, phone +46 46-33 76 11, (hugh.salter@draco.se.astra.com), Anders Åström, phone +46 46-33 70 12 or Bo Servenius, phone +46 46-33 73 72.

Send your application including a CV and the names of two referees, quoting Ref.No. 145/98S, before December 7 to Astra Draco, Personnel Department, Anette Crudo, Box 34, S-221 00 Lund, Sweden



POSTDOCTORAL POSITION

The Medical University of South Carolina (MUSC), Department of Surgery and Hollings Cancer Center invite candidates with Ph.D. or M.D. degrees to apply for a Postdoctoral position in cancer gene therapy using RNA/ DNA chimera technology (see: Kren at al., Nature Genetics 4:285, 1998). The incumbent will develop a cell-specific, nonviral delivery system that enables point mutations to be corrected at a high frequency. Applicants should have experience in cell biological and molecular techniques, and/or peptide chemistry. Start date spring 1999. A strong, research-oriented faculty and outstanding facilities and environment will nurture science careers of motivated applicants. For more information about MUSC, please visit our website: http://www.musc.edu. Interested applicants please send complete curriculum vitae, including brief research summary, thesis title, and mentor, and the names and addresses (e-mail, postal, and telephone number) of three references to: Dr. Michael Mitas, Hollings Cancer Center, Room 313, 86 Jonathan Lucas Street, Medical University of South Carolina, Charleston, SC 29425. FAX: 843-792-3940; Telephone: 843-792-1451; e-mail: mitasm@ musc.edu.

POSTDOCTORAL RESEARCH MOLECULAR VIROLOGY

Position available to study the expression of cytokines in an attenuated coxsackievirus B3 (CVB3) vector in cell culture and in mice. Additional information is found at website: http://www.unmc.edu/Pathology/Myocarditis. Applicants will have a Ph.D. or M.D. with demonstrable molecular biological background and experience in cell culture and basic mammalian virologic techniques. The position is paid US\$25,000 per year and includes benefits. Mail a letter of interest outlining professional background, current curriculum vitae, and list of references to: Steven Tracy, Ph.D., Enterovirus Research Laboratory, Department of Pathology and Microbiology, University of Nebraska Medical Center, 986495 Nebraska Medical Center, Omaha, NE 68198-6495.

University of Nebraska Medical Center is an Equal Opportunity Employer/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP. Antigen presenting cells. A Postdoctoral Fellowship position is available immediately to study the regulation of cytokine production by macrophages and dendritic cells following their interactions with intracellular pathogens. The position will include a minimum of three years of support from the Department of Microbiology and Immunology. The applicant should have a Ph.D. in immunology, cell biology, or microbiology. Preference will be given to applicants eligible for PHS Training Grant support. Please send curriculum vitae and the names of three references to: David M. Mosser, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. E-mail: dmosser@astro.ocis.temple.edu. Temple University is an Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans

A POSTDOCTORAL POSITION is available immediately for participating in an ongoing study of positional cloning of tumor suppressor gene in human male germ cell tumors. The research involves the use of methods in molecular biology and genome analysis. Applicants should have a Ph.D. with at least one year of experience in cell biology, molecular biology. Send curriculum vitae, with a brief description of research experience, and names of three references to: V.V.V.S. Murty, Ph.D., Department of Pathology, College of Physicians and Surgeons of Columbia University, 630 West 168th Street, New York, NY 10032. Telephone: 212-305-7914; FAX: 212-305-5498; e-mail: vvm2@columbia.edu.

POSTDOCTORAL POSITION

The position is available at the Heineman Medical Research Laboratory in the Division of Biomedical Engineering. The laboratory has close ties with the Carolinas Medical Center and the University of North Carolina at Charlotte. An individual will participate in research on heart valve and aneurysm. An individual should have a strong background in solid mechanics and FEA and be able to apply these to blood vessels. Send résumé to: Dr. Mano J. Thubrikar, Heineman Medical Research Laboratory, P.O. Box 32861, Charlotte, NC 28232. FAX: 704-355-1435.

POSITIONS OPEN

POSTDOCTORAL POSITION MOLECULAR AND CELL BIOLOGY COLUMBIA UNIVERSITY

Postdoctoral position to investigate oxidative stress and cataract formation. Applicants should have a Ph.D. and/or M.D. and a strong background in techniques in molecular and cell biology including preparation of vectors for transgenics, PCR, RTPCR, cloning, Western, Northern, and Southern analyses, and cell transfection. Position can lead to a tenure-track Assistant Professorship. Fluency in written and spoken English is essential. To apply, e-mail, FAX, or FedEx a curriculum vitae, short description of research interests, and names and addresses of three references to: Dr. Abraham Spector, Ophthalmology Research, College of Physicians and Surgeons of Columbia University, 160 Fort Washington Avenue, 5th Floor, Room 509, New York, NY 10032. FAX: 212-305-6205; e-mail: as42@columbia.edu. Columbia University takes 4ffimative. Action to ensure Equal Employment Opportunity.

POSTDOCTORAL POSITIONS IN ECOLOGY AND ENVIRONMENTAL SCIENCE

The Center for Environmental Analysis (CEA) at California State University at Los Angeles secks three Post-doctoral positions. The Center conducts basic and applied research in ecosystems of Southern California (website: http://cea-crest.calstatela.edu). The appointments are one year renewable, and salaries range from \$37,000 to \$41,000 per year plus benefits. At their discretion, appointments may gain teaching experience.

Ecosystems Écologist. Modeling photosynthetic fluxes and ecosystem processes in evergreen-dominated systems using hyperspectral remote sensing. Experience in process modeling and/or remote sensing preferred.

Marine Community Ecologist. Collaboration with Field Ecologist, GIS analyst, and simulation modeler analyzing demographic landscapes of benthic species. Experience with intertidal field surveys, mathematical modeling, or spatial statistics preferred.

Marine Population Geneticist. Collaboration with Molecular Geneticist/Marine Ecologist investigating ecology and evolution of marine invertebrates. Use of CEA-CREST molecular genetics facility.

Send curriculum vitae, three references, relevant publications, and inquiries to:

Dr. Carlos Robles, Director CEA-CREST California State University at Los Angeles Los Angeles, CA 90032 Telephone: 323-343-2067 E-mail: crobles@calstatela.edu

POSTDOCTORAL POSITION available to study mechanisms of DNA recombination and repair in mammalian cells with a focus on understanding the origin of genomic instability in cancer cells. Experience in molecular biology required. Send curriculum vitae with bibliography, description of research experience, and names, addresses, e-mail addresses, and telephone numbers of three references to: Dr. Alan S. Waldman, Department of Biological Sciences, Coker Life Sciences Building, University of South Carolina, Columbia, SC 29208. E-mail: awaldman@s.edu.

A POSTDOCTORAL POSITION is available to study the mechanisms of autoimmunity and immune tolerance, and gene therapy in lupus and other autoimmune diseases. Ph.D. or M.D.-Ph.D. candidates with experience in cellular immunology and molecular biology is desirable. Send curriculum vitae and contact information of three references to: Dr. Ram S. Singh, Associate Professor of Medicine, Univesity of Cincinnati, P.O. Box 670563, Cincinnati, OH 45267-0563. FAX: 513-558-3799; e-mail: singhrm@email.uc.edu.

POSTDOCTORAL POSITION available immediately to study the folding pathway, thermodynamic stability, and fibrillogenesis of the recombinant prion protein and its mutants. Strong background in protein chemistry and biophysical/spectroscopic methods required. Send curriculum vitae to: W. K. Surewicz, Ph.D., Department of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106. E-mail: wks3@pop.cwru.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION in microbial pathogenesis available to investigate heme acquisition systems used by Haemophilus influenzae. Emphasis will be placed on identification and characterization of H. influenzae outermembrane proteins that interact directly with human heme carrier proteins and on H. influenzac gene products involved in the regulation of expression of these proteins. Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Positions include salary, fringe benefits, and the opportunity to work in a dynamic research environment. Position available after January 1, 1999. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw.swmed.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION ENH RESEARCH INSTITUTE NORTHWESTERN UNIVERSITY

A funded three-year position is available immediately to study cytotoxic cell granule-mediated and death receptor-dependent apoptosis. Present studies: (1) to characterize mechanism for perforin-mediated delivery of granzymes; (2) use caspase-deficient lines to study activation of caspase cascade following delivery of granzymes or after death receptor ligation. Background in biochemistry and molecular biology is required. Publication(s) in field of apoptosis is essential. Curriculum vitae and references to: Dr. Christopher J. Froelich, ENH Research Institute, 2650 Ridge Avenue, Evanston, IL 60202. E-mail: granzyme@merle.acns.nwu.edu. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR IMMUNOLOGY AT La Jolla Institute for Allergy and Immunology

To investigate TNF-related cytokines, lymphotoxin $\alpha\beta$ and LIGHT (Immunity 8:21–30, 1998) and their receptors in host defense against herpesvirus. One position is open for Biochemist to investigate signaling pathways. The other position is for an Immunologist or Virologist to investigate the role of these cytokines in controlling herpesvirus infections using tissue culture and in vivo models. The positions are available to highly qualified and motivated individuals. Please submit curriculum vitae with a summary of research interests and names of three references to. Dr. Carl Ware, La Jolla Institute for Allergy and Immunology, 10355 Science Center Drive, San Diego, CA 92121. Visit our website: http://www.liai.org.

POSTDOCTORAL POSITIONS MOLECULAR MICROBIOLOGY

Two Postdoctoral positions are available to study environmental regulation of gene expression in Gram-positive oral bacteria. The studies will combine molecular biology with physiologic manipulation of suspended and adherent populations of bacteria. Preference will be given to individuals with demonstrated expertise in DNA and RNA manipulations. Please send curriculum vitae and the names of three references to: Dr. Robert A. Burne, Center for Oral Biology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. E-mail: robert_burne@urmc.rochester. edu. The University of Rodester is an Equal Opportunity/Affirmative Action Employer. Minority and female candidates are enouraged to apply.

CONFERENCE



International Conference on Modeling and Simulation of Microsystems, April 19–21, 1999. San Juan Marriot Resort and Stellaris Casino, San Juan, Puerto Rico, USA. "An Interdisciplinary Integrative Forum on Modeling, Simulation, and Scientific Computing in the Sensors, Biotechnology, Semiconductor, and Materials Fields." Full-day workshop on computational initiatives in biotechnology: computational chemistry, structural biology, protein engineering, genomics, and bioinformatics. Abstracts due December 14, 1998. For more information, website: http://www.iamcm.org/MSM99.

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Ming-Liang Lee, M.D., Ph.D. President, Tzu Chi College of Medicine and Humanities 701, Section 3, Chung-Yang Road Hualien 970 Taiwan

AWARDS

POSTDOCTORAL AND SENIOR RESEARCH AWARDS NATIONAL RESEARCH COUNCIL

The National Research Council offers awards for postdoctoral scientific research to be conducted in residence at participating U.S. government laboratories. Awardees design their own projects to be compatible with the overall interests of the sponsoring laboratory. Stipends for recent Ph.D. recipients range from \$30,000 to \$50,000 depending upon sponsoring laboratory and are appropriately higher for additional experience. Application deadlines are January 15, 1999, for review in late February 1999; April 15, 1999, for review in late June 1999; and August 15, 1999, for review in late October 1999. For further information and application materials, contact: The Associateship Programs, National Research Council (TJ 2114/SS), 2101 Constitution Avenue N.W., Washington, DC 20418. Website: http://rap.nas.edu/; e-mail: rap@nas.edu; FAX: 202-334-2759; Telephone: 202-334-2760. Qualified applicants will be reviewed without regard to race, creed, color, age, sex, or national origin.

ANNOUNCEMENT

THE LEON AND BERTHA GOLBERG POSTDOCTORAL FELLOWSHIP IN TOXICOLOGY Curriculum in Toxicology University of North Carolina at Chapel Hill

Applications are requested for Postdoctoral Fellowships in toxicology. Outstanding candidates are encouraged to identify potential mentors from the University of North Carolina faculty and develop and submit a research proposal for consideration by the Golberg Fellowship Committee by February 1, 1999. The Fellowship will carry a stipend of \$32,000 per year plus travel expenses to present research results at the Society of Toxicology Annual Meeting. For additional information visit our website: www.med.unc.edu/toxicology/ or write: Dr. James Swenberg, CB# 7400, University of North Carolina, Chapel Hill, NC 27599. E-mail: james_ swenberg@unc.edu.

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COURSES & TRAINING

PREDOCTORAL STUDENTS. Studies of chemical carcinogenesis by polycyclic hydrocarbon derivatives. Synthesis, HPLC, GC/MS, metabolic products, carcinogenic properties. See: BBRC: 231:144; 231:712; 243: 30. Fellows must be U.S. citizens or permanent residents. Deadline: February 15, annually. Contact: Prof. J. W. Flesher, Department of Pharmacology, Experimental Cancer Research Laboratory, University of Kentucky College of Medicine, Lexington, KY 40536-0298. FAX: 606-323-1981.

POSITIONS OPEN

POSTDOCTORAL FELLOW. NIH-funded position available immediately to join group investigating posttranscriptional gene regulation of cytokines. Experience in cell and molecular biology essential with interest in human disease helpful. Please send curriculum vitae, research interests, and the names of three references to: Dr. James Malter, University of Wisconsin Hospital, B4/263, 600 Highland Avenue, Madison, WI 53792. E-mail: js.malter@uwmsg.hosp.wisc.edu; FAX: 608-263-1568.

EUROPEAN OPPORTUNITIES

RESEARCH ASSOCIATE POSITION NEUROBIOLOGIST

The position is available from January 1999 to study cellular and synaptic mechanisms of pain and analgesia in vitro. Patch-clamp recordings in spinal cord slices (see: Science 281:419-424, 1998, J. Neurosci. 17:6483-6491, 1997), imaging and antisense technologies will be used in this project. The project is part of a major, newly established research program at the university. A highly competitive salary plus benefits and fascinating opportunities for cooperations will be provided for an experienced and highly motivated Ph.D. and/or M.D. at the University of Heidelberg, one of Europe's leading centers in the field of neuroscience. Please submit curriculum vitae plus names and addresses of three referees to: Prof. J. Sandkühler, Department of Physiology II, University of Heidelberg, Im Neuenheimer Feld 326, Heidelberg 69120 Germany. E-mail: af8@ix.urz.uni-heidelberg.de.

POSTDOCTORAL FELLOW MOLECULAR BIOLOGY

A full-time Postdoctoral position is available immediately to study the functional role of carbon monoxide in the regulation of hepatic stress gene expression. Applicants should have a Ph.D. in the life sciences with expertise in advanced techniques of molecular biology, and less than five years of postdoctoral experience. Position offers the possibility of a postdoctoral thesis (habilitation). Excellent facilities and research environment. Please send curriculum vitae/bibliography no later than January 15, 1999, to: **Dr. Benedikt H. J. Pannen, Division of Ex**perimental Anaesthesia, Hugstetter Strasse 55, Freiburg D-79106 Germany.

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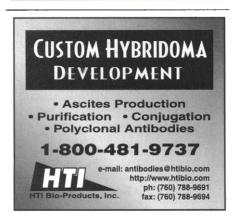
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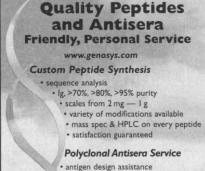
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