

In 1929 science advanced with a big bang.



Edwin Hubble in the Palomar Observatory, 1949 His namesake, the Hubble Space Telescope, is shown abou

In 1929, AAAS member and Fellow Edwin Hubble proved that galaxies move apart in an expanding universe, caused by the "Big Bang" billions of years earlier. He had originally proved that other galaxies existed, and won the AAAS Newcomb Cleveland Prize in 1924 for research on "Cepheids in Spiral Nebulae," presented at the AAAS Annual Meeting.

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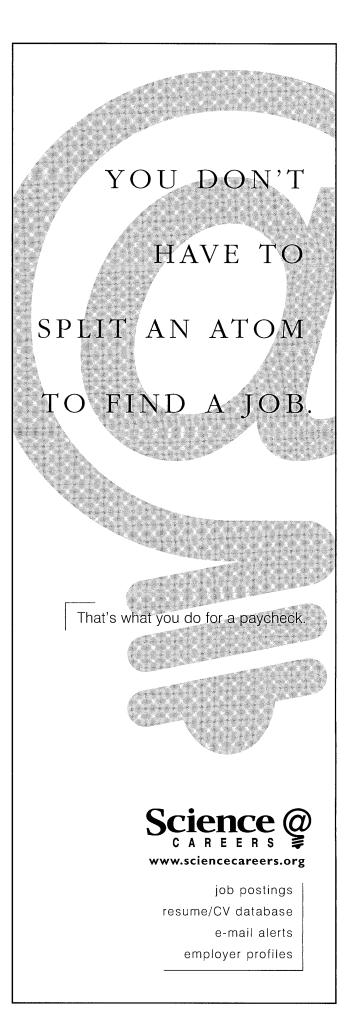
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Stargazer's Delight StarGazerSoft

Ruedi Schmid Basel Switzerland \$29, SF40, or €30 Available online from Kagi Software http://order.kagi.com/?UOB **EYE ON THE SKY**

The power and storage capabilities of modern personal computers are a natural match for managing the billions of bits of information generated by the various genome projects. Likewise, software developers have realized that powerful personal computers can handle vast collections of astronomy data. One of the

more recent software products is StarGazerSoft's Stargazer's Delight, which provides a different view of the sky than can be seen with several other packages.

In contrast to products, such as Starry Night, which provide views of only a portion of the sky in any given direction, Stargazer's Delight projects the complete view of the sky from any point on Earth and at any time above the entire horizon, depicted as a circle. The effect is a little disorienting at first, but is quite easy to get used to. Such a design provides a more accurate and comprehensive view of the stars in the night sky.

Many options are available within the program. They include identification or location of the 88 recognized constellations, the other eight planets in the solar system, a dozen minor planets, and various facts about them. The last option, unfortunately, has the effect of filling the screen with too much information. For example, one can select to have the distance in light years to each star be shown, resulting in a screen displaying a jumble of meaningless numbers and nothing else. Users of the program who pay to register it receive access to views of over 260,000 stars. Though this, by itself, would be overwhelming on a small screen, the program's zoom function provides a tidy way to avoid the problem, allowing users to view small portions of the sky, and thus a manageable number of stars, at a time.

The Stargazer's Delight program has some quirky design features in its interface. The program's use of sound (music that plays upon entry into the program and when some functions are selected) might be considered "funky" by some, but corny or bothersome by most. The ease with which users can set up the program to fill the screen with an overwhelming amount of information is undesirable. On the positive side, the sky projected as a circle makes for interesting views, and the program is one of the first astronomy packages to function under the Macintosh OS X. The low price of Stargazer's Delight makes it one of the least expensive astronomy packages on the market. The program is recommended for any astronomy buff on a tight budget working on the Mac OS X.

—Kevin Ahern

Department of Biochemistry and Biophysics, Oregon State University, Corvallis, OR 97331, USA. E-mail: ahernk@orst.edu

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POSITIONS OPEN

CHAIR

Department of Chemistry, Medical Technology, and Physics Monmouth University

The Chemistry, Medical Technology, and Physics Department of Monmouth University invites applica rions for a tenure-track position as ASSOCIATE PROFESSOR or PROFESSOR of chemistry and Department Chair beginning July 1, 2003. The successful candidate will be expected to lead the Department; to work with the Dean and other Chairs in the School of Science, Technology, and Engineering; to undertake scholarly research with undergraduate students; and to teach. Candidates must have a Ph.D. in chemistry or a closely related field, a record of academic leadership and scholarly achievement, and a strong commitment to teaching and research at the undergraduate level. Background in one or more of the following areas is desirable: biochemistry, inorganic, or organic chemistry.

The Department includes 12 full-time chemistry and physics faculty. It offers an ACS-approved B.S. in chemistry, a B.S. in chemistry with a concentration in biochemistry, a core B.S. in chemistry for double majors, and a B.S. in medical technology. This is a dy-namic department and the new Chair will be expected to develop and advance new initiatives.

Monmouth University has 6,000 students. It is located along the Central New Jersey shore approximately one hour south of New York City and 1.5 hours northeast of Philadelphia, Pennsylvania. Monmouth University's 153-acre, suburban campus is home to approximately 30 baccalaureate degree programs and 11 Master's programs.

Applicants should send a cover letter, résumé, and list of references to: Dr. Francis C. Lutz, Dean, School of Science, Technology, and Engineering, Monmouth University, West Long Branch, NJ 07764-1898. Review of applications will begin December 2, 2002. Submissions should include experience in teaching, research, leadership, and three references.

Monmouth University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT, ASSOCIATE, or FULL PRO-FESSOR of bioengineering, Penn State: The Penn-sylvania State University invites applications for tenure-track positions in its new Department of Bio-engineering at its University Park campus. Through the generosity of the Whitaker Foundation, Penn State has expanded its longstanding graduate program into a new department with an undergraduate major leading to the B.S. degree in bioengineering. This major consists of a core curriculum of bioengineering courses and specialized instruction in the arbioinstrumentation and devices, medical imaging, bioinstrumentation and devices, medical imaging, Penn State has a 30-year history of multidisciplinary graduate training, and our new department has solid institutional support to promote faculty growth and development. Stimulating and productive interac-tions between engineering and life science faculty are abundant and revolve around well-supported research programs in Penn State's Materials Research Laboratory, Center for Locomotion Studies, Life Science Consortium, and the Institute for Biomedical Engineering at the Milton S. Hershey Medical Center. For more details, visit our department at website: http://bioeng/psu.edu. Applicants should have a Ph.D. in bioengineering or a related field with an emphasis on engineering applications to the life sciences. Preference will be given to applicants with research interests in bioMems; micro/nanotechnology; medical imaging; tissue engineering, and analysis of physiological systems at the tissue, cellular, and molecular level. Send curriculum vitae; statement of research and teaching objectives; and names of three references by March 1, 2003, to: Dr. Herbert H. Lipowsky, Professor and Chairman, Department of Bioengineering, Position Number \$-14492, Penn State, 205 Hallowell Building, University Park, PA 16802. Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its workforce.

POSITIONS OPEN

FACULTY POSITION **Biomedical Imaging**

The University of Massachusetts Medical School is seeking a faculty member in the field of applied optics in order to expand its Biomedical Imaging Group. This group has a successful tradition in the development and application of novel imaging tools and techniques involving light microscopy, image processing and image restoration, advanced computing, and im-age analysis and multidimensional image visualization. It is a highly collaborative, interdisciplinary group of Engineers and Scientists from the fields of optics, mathematics, computer graphics, biophysics, and biology that builds and applies imaging and analysis tools to the discovery of basic aspects of cellular organization and dynamics. It is a world leader in the development of high-speed microscopy, highresolution 3-D image reconstruction, and computer graphics for microscopy. The group seeks to identify an enthusiastic candidate with the requisite engineering skills whose main responsibility would be to develop new optical approaches for biological imaging in collaboration with the group and the numerous superb biomedical science research laboratories in its environment. The Biomedical Imaging Group is affiliated with the Department of Physiology and is located within the Program in Molecular Medicine. The faculty appointment with competitive salary will be made commensurate with qualifications and experience. Applicants should submit curriculum vitae and three references to:

Kevin E. Fogarty, Chair Biomedical Imaging Search Committee

Michael P. Czech, Chair Program in Molecular Medicine University of Massachusetts Medical School **373 Plantation Street** Worcester, MA 01605

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ASSISTANT PROFESSOR, PHYSIOLOGY. The Department of Biological Sciences, Bridgewater State College, Bridgewater, Massachusetts, invites applications for a full-time, tenure-track position beginning fall 2003. The position requires teaching human anatomy and physiology, animal physiology, introductory biology, and upper-level courses appropriate for the Department's biomedical concentration. The successful candidate must have an earned Ph.D. by June 2003 and excellent communication skills. A strong commitment to teaching and research in an undergraduate setting as well as to advising prehealth students in the biomedical concentration and supervising original undergraduate research are required. Participation in equipment procurement is required. Teaching experience is preferred, as is postgraduate research. Please submit curriculum vitae; a letter describing teaching and research interests; official transcripts; and names, addresses, and telephone numbers of three professional references to: Office of Human Resources, Bridgewater State College, Bridgewater, MA 02325. Review of applications will begin December 11, 2002, and continue until the position is filled. Bridgewater State College is an Affirmative Action/Equal Opportunity Employer that actively seeks to increase the diversity of its workforce.

Department of Cell Biology and Neuroscience, Montana State University, tenure-track faculty positions in the areas of (1) theoretical and computational neuroscience and (2) cellular and molecular neuroscience. Faculty at all levels from ASSISTANT to FULL PROFESSOR will be considered.

Terminal degree required. Both positions are expected to establish a vigorous, independent research program and contribute to undergraduate and graduate teaching in their area of expertise. New faculty will have access to multiple graduate admissions programs and outstanding infrastructural support. For complete vacancy announcement and application directions, see website: http://www.montana.edu/ level2/jobs.html. Screening begins November 30, 2002. Americans With Disabilities Act/Affirmative Action/ Equal Opportunity/Veterans Preference.

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EMPLOYMENT OPPORTUNITY SENIOR PRINCIPAL INVESTIGATOR, Research Biologist U.S. ENVIRONMENTAL PROTECTION AGENCY Environmental Carcinogenesis Division Molecular Toxicology Branch Research Triangle Park, North Carolina

The U.S. Environmental Protection Agency (EPA) is seeking qualified applicants for the position of Research Biologist, GS-0401-14 (Announcement # EPA-RTP-DE-2003-0220). The position serves as a Senior Principal Investigator within the Molecular Toxicology Branch, Environmental Carcinogenesis Division (ECD), National Health and Environmental Effects Research Laboratory (http://www.epa.gov/nheerl/ecd/). This position is located in the Research Triangle Park, North Carolina. This is a permanent, full-time position with a salary range of \$76,271 to \$99,150, per annum, commensurate with qualifications. The selected candidate will be eligible for a full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave benefits. United States citizenship is required.

The ECD, which consists of three research Branches, is a multidisciplinary carcinogenesis program with an EPA staff of approximately 55 employees. The Division focuses its research on addressing the issues, assumptions, and uncertainties in cancer risk assessment and serves as a focal point for planning, coordinating, conducting, supporting, and evaluating mechanistic research to improve cancer risk assessment. The Senior Principal Investigator will conduct a research program that addresses the mechanisms of action of chemical carcinogens with particular emphasis regarding the effects of chemical carcinogens on gene transcription (genomics) and gene translation (proteomics). Additionally, this position trains and oversees a technical staff; collaborates with other researchers to address needs of the EPA; publishes scientific articles in peer-reviewed journals; and delivers lectures and seminars on research accomplishments. The position requires an experienced carcinogenesis researcher with national recognition as an expert in the area of genomics, computational biology, or closely related research areas.

HOW TO APPLY: Vacancy announcement and application instructions will be posted on the U.S. Office of Personnel Management (OPM) web site at http://www.usajobs.opm.gov/a9epa.htm as of November 04, 2002 under announcement number RTP-DE-2003-0220. The application deadline is December 13, 2002.

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POSTDOCTORAL POSITIONS in BIOPHYSICAL RESEARCH

Postdoctoral openings in the laboratories of Drs. Vince Hilser and Wayne Bolen are available on fundamental research into the structural energetics and thermodynamics of protein stability and function, and the effects of naturally occurring osmolytes on these properties. The combined effort within these laboratories integrates experiment and computation in a manner that provides insight into ensemble properties of proteins, properties that are the source of interrelationships between stability, function, solvation, and dynamics. Candidates must have a strong background in biophysics/chemistry or engineering, with proficiency in two or more areas involving protein folding/stability, calorimetry, solution thermodynamics, rapid kinetics, computational modeling, and NMR spectroscopy.

Send curriculum vitae and the names and contact information of three references to: Ms. Karen Myers, Dept. of HBCG, University of Texas Medical Branch, 5.104 MRB, 301 University Boulevard, Galveston TX 77555-1068. Telephone: 409-772-2317, FAX: 409-772-6334: e-mail: kmmyers@utmb.edu. UTMB is an Equal Opportunity/Affirmative Action M/F/D/V employer. Minorities and females are encouraged to apply.



Technical University of Denmark

Professor in Theoretical Nanotechnology

A position as professor of Theoretical Nanotechnology at Mikroelektronik Centret (MIC), Technical University of Denmark, is available January 1, 2003. DTU

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Further information may be obtained at www.mic.dtu.dk/research/Science/Science.htm

The full text of the announcement can be seen on DTU's homepage at www.dtu.dk/job

Application deadline: 2 December 2002 at 12.00.



TUFTS UNIVERSITY School of Medicine

Sackler School of Graduate Biomedical Sciences

FACULTY OPENINGS TUFTS UNIVERSITY SCHOOL OF MEDICINE

The Department of Anatomy and Cellular Biology at Tufts University School of Medicine is seeking candidates for multiple FACULTY **POSITIONS** at all ranks. The Department is undergoing significant expansion during the next few years under the leadership of a new Chair. Applications are especially invited from scientists working in the area of developmental biology. In particular, the Department is looking to build on existing strengths in gametogenesis, cell differentiation, and developmental neurobiology by the recruitment of new faculty who use genetic models to assess vertebrate or invertebrate development, which will also complement a major, University-wide initiative in Genetics. Start-up funds, core facilities, and space are competitive and include laboratories in the Jaharis Center, a new research facility that opens in November 2002. Teaching will be in Professional or Graduate School Courses, and the load will be modest.

Please send a curriculum vitae, representative reprints, a brief statement of research plans, and the names, addresses, and telephone numbers of at least three referees to: Dr. Karina Meiri, Chair of the Search Committee, Department of Anatomy and Cellular Biology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.

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Applicants should forward a curriculum vitae, a description of their past research accomplishments and proposed research program, selected reprints, and a list of potential references to: James E. Rothman, Ph.D. c/o Fran Berman, Cellular Biochemistry and Biophysics Program, Box 135, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Application deadline is December 15, 2002. EOE/AA

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Please send curriculum vitae and a description of research to:

Stuart H. Orkin, M.D., Search Committee Chairman Division of Hematology, Children's Hospital 300 Longwood Avenue, Boston, MA 02115

Children's Hospital and Harvard Medical School are equal opportunity/affirmative action employers. Women and minority candidates are particularly encouraged to apply.

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University of California, San Francisco CENTER FOR REPRODUCTIVE SCIENCES Assistant Professor/Associate Professor Developmental Biologist

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Please send a curriculum vitae, statements of research interests and teaching experience, reprints of up to three selected publications, and the names and addresses of three references to:

Renee A. Reijo Pera, Ph.D. Search Committee Chair Center for Reproductive Sciences Department of Obstetrics, Gynecology and Reproductive Sciences Box 0556 University of California, San Francisco San Francisco, CA 94143-0556

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THREE POSTDOCTORAL POSITIONS INDIANA UNIVERSITY BLOOMINGTON

Multidisciplinary funding from the David and Lucille Packard Foundation will support an integrated five-year field and laboratory study of biogeochemical and organismal responses to repeated cycles of wetting and drying in the hyper-alkaline lakes on the Oregon basalt plateau. www.indiana.edu/~lifeedge.

- Biogeochemistry, Department of Geological Sciences: Dr. Lisa Pratt's group will monitor seasonal changes in water column, pore water, and sediment using microelectrode arrays, radiation spectrometry, and stable isotopic analyses of hydrogen, carbon, oxygen, and sulfur.
- RNA Biochemistry, Department of Chemistry: Dr. Donald Burke's group is isolating new ribozymes in a laboratory environment modeled after field settings, emphasizing reactions that might have been used by some of the earliest organisms around the time of the Origin of Life.
- Environmental Microbiology, Department of Biology: Dr. Carl Bauer's group will survey the diversity of microbial species in and around ephemeral alkaline lakes and begin cultivation and physiological/biochemical analysis of hypersaline and alkaline tolerant microorganisms.

Candidates should send a statement of research interest, CV, and three letters of recommendation to: Ruth Droppo, Department of Geological Sciences, Indiana University, 1001 E. 10th St., Bloomington IN 47405; email: rdroppo@indiana.edu.



The John Innes Centre (http://www.jic.bbsrc.ac.uk/) is one of the world's leading not-for-profit research institutes.

Our research is currently organised in six major programmes:

Biological Chemistry
 Cell and Developmental Biology
 Crop Genetics
 Disease and Stress Biology
 Metabolic Biology
 Molecular Microbiology
 Research in these programmes is supported by extensive plant and microbial growth facilities and major investment in genomics, proteomics, protein
 structure/function, bioinformatics and other platform technologies.

We are now seeking to fill three new project leader career-track positions as part of a sustained recruitment drive over the next ten years. Competitive start-up funding will be provided. Successful candidates are expected to establish high quality independent research programmes.

Applications and preliminary enquiries from outstanding investigators in all areas of our science are welcome on a continuing basis, and in the current round Project Leader posts are available in the following areas:

Post 1: Crop Genetics - Ref: 1196

Scientists with an interest in the development of novel strategies for the identification and exploitation of cereal genetic variation in an area of crop-related biology including fertility, perreniality, spike morphology, root biology.

Post 2: Metabolic Biology - Ref: 1197

Scientists with an interest in any of the following areas: molecular, genetic and biochemical approaches to the control of metabolism; integration of physiological processes throughout the plant; genetic basis and targeted engineering of metabolic diversity.

Post 3: Any area of science relevant to our major programmes - Ref: 1198

Outstanding scientists in any area of research relevant to the science programmes (http://www.jic.bbsrc.ac.uk/corporate/Science/index.htm) and overall mission of JIC.

Application forms can be accessed from <u>http://www.jic.bbsrc.ac.uk/corporate/vacancies/pl_advert.htm</u> or requested by E-mail to <u>jicpers@bbsrc.ac.uk</u> or by mail to The Personnel Officer, John Innes Centre, Norwich Research Park, Colney, Norwich, Norfolk, NR4 7UH, quoting the appropriate reference number. Please include C.V., names of three academic referees, statements of current research and future research plans (no more than two sides for each). Further particulars can be obtained from <u>http://www.jic.bbsrc.ac.uk/corporate/vacancies/project_leader.htm</u> and general information about the John Innes Centre and its research from <u>http://www.jic.bbsrc.ac.uk</u> To ensure consideration in the current search, applications should be received by 4th December 2002.

The John Innes Centre is a registered charity (No223852) grant-aided by the Biotechnology and Biological Sciences Research Council and is an Equal Opportunities Employer.

ROSALINDFRANKLINFELOWSHIPSFOR WOMEN IN SCIENCERuGRijksuniversiteit Groningen

RIJKSuniversitett GI



The Faculty of Mathematics and Natural Sciences of the University of **G R O N I N G E N** (the Netherlands), invites applications for a **Rosalind Franklin Fellowship**. To promote the participation of women scientists in the faculty, five tenure-track fellowships will be awarded to outstanding women scientists from any of the disciplines mathematics, physics, astronomy, chemistry, biology, pharmacy and computing science.

FOR FURTHER DETAILS ON THESE POSITIONS, SURF TO

www.fwn.rug.nl



Faculty of Mathematics and Natural Sciences,

JOHN INNES CENTRE

University of Groningen, Nijenborgh 4, 9747 AG Groningen, The Netherlands.





SUPERVISORY VETERINARY MEDICAL OFFICER/MICROBIOLOGIST USDA, Agricultural Research Service National Animal Disease Center - Ames, Iowa

The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Virus and Prion Disease of Livestock Research Unit, Ames, Iowa is seeking an innovative, dynamic and experienced scientist. The mission of this unit is to conduct basic and applied research on prevention, diagnosis, control, and treatment of disease of food producing animals and wildlife caused by viruses and prions. Research involves a variety of techniques associated with pathology, cytochemistry, virology, immunology, and molecular biology. The unit's research is multi disciplinary, with an increasing emphasis on new technologies.

The responsibilities of the Supervisory Research Microbiologist/Veterinary Medical Officer are planning, conducting, and reporting personal research; guiding research programs and supervising scientists within the laboratory; and evaluating, reviewing, and recommending or implementing changes in the research programs. Requires knowledge of microbiology, molecular biology, epidemiology, and/or veterinary medicine and demonstrable research leadership and management skills. Applicants must meet basic education requirements as described in each announcement, plus directly related Ph.D. and/or professional research experience. Incumbents will be expected to publish and present research results.

The position is competitive, permanent appointment GS-14/15, salary is commensurate with experience (\$76,271 to \$116,633 per annum) plus benefits. U.S. citizenship is required. For information on application procedures, contact Janae Lentz at 515-663-7277 or visit the ARS vacancy website www.ars.usda.gov/divison/hrd/vacancy/vac2.htm, announcement ARS-X2W-2479. For specific questions regarding this position, contact: Dr. Keith Murray, telephone 515-663-7201; email:Kmurray@nadc.ars.usda.gov. Applications in response to this ad must be postmarked by specific cutoff dates.

THE USDA /ARS IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER.

STOWERS INSTITUTE

TECHNICAL/MANAGEMENT POSITIONS ANIMAL RESOURCE CENTER

The Stowers Institute for Medical Research is seeking highly motivated and experienced technologists and managers to fill openings at several levels in its Animal Resource Center located in the Institute's new, state-of-the-art barrier facility for mice.

Successful candidates will have strong expertise in a combination of the following: barrier facility management and mouse colony maintenance, mouse cryopreservation, mouse rederivation by zygote implantation, IVF, production of zygotes and blastocysts for research labs, and good surgical skills. Candidates should possess significant technical and/or supervisory experience, good communication skills, and an advanced academic degree or equivalent work experience.

More information may be found at:

www.stowers-institute.org

The Stowers Institute is committed to equal opportunity in all its programs.

UIC FACULTY POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology in the College of Medicine at the University of Illinois at Chicago (UIC), is continuing its faculty recruitment effort and is seeking to fill tenured / tenure track faculty positions at the level of Assistant, Associate or Full Professor. UIC is the largest institution of higher learning in the Chicago area and is a major center for research and education. UIC's College of Medicine is part of the Illinois Medical District, the largest complex of medical centers in the United States. The faculty of the Department of Microbiology and Immunology has active and interdisciplinary research programs spanning several major disciplines, including molecular immunology, virology, microbial pathogenesis, host-pathogen interactions, and structural biology. UIC is a member of a consortium of academic institutions submitting a grant application to NIH for designation as a Regional Center of Excellence in Biodefense and Emerging Infectious Diseases Research, and has active research programs in this area.

The successful faculty candidates are expected to have and maintain a vigorous independent research program in one of the above mentioned disciplines and participate in the research and graduate training programs in the department. Generous laboratory space and start-up funds are available. Applicants are required to have a Ph.D., M.D. or equivalent doctorate level degree and a proven track record in research as evidenced by consistent scholarly publications and grant funding.

For fullest consideration, please send an application, including curriculum vitae, a brief statement of future research plans, and a list of references, by **December 31, 2002** to:

Search Committee Department of Microbiology and Immunology University of Illinois at Chicago, College of Medicine 835 S. Wolcott (M/C 790) Chicago, IL. 60612-7344

For more information about the Department of Microbiology and Immunology; please visit our Web Site: http://www.uic.edu/depts/mcmi/.

The University of Illinois at Chicago is an Affirmative Action/ Equal Opportunity employer. Women and minorities are strongly encouraged to apply.

Aculty Positions in Murine Models of Human Cancer at the Wistar Institute

The Wistar Institute is seeking candidates with a Ph.D. and/or M.D. to establish a vigorous, independent research program using murine systems to study molecular and cellular aspects of oncogenesis and tumor biology. Candidates will be expected to work in interdisciplinary programs focused in gene expression and regulation, oncogenesis, or tumor immunology. Of particular interest are individuals using animal models to study melanoma, lung cancer, breast cancer, or brain tumor initiation and progression. While The Wistar Institute is purely a basic research entity, there is outstanding potential for inter-action with the strong basic and clinical scientists at the University of Pennsylvania Highly competitive laboratory start-up support, salary and fringe benefits will be offered. The laboratory will be located in newly renovated space. The Wistár Institute has an outstanding animal facility with the capacity to support large pro-grams using animal model svstems.

The Wistar Institute is the nation's oldest independent

biomedical research institute and an NCI-funded basic research cancer center that supports state-of-the-art core laboratory facilities.

It is an independent entity located on the University of Pennsylvania campus and has access to superb graduate students. The Institute currently has an annual budget of over 30 million dollars and houses 27 independent laboratories in three programs: Gene Expression and Regulation, Molecular and Cellular Oncogenesis, and Immunology. More Information on The Wistar Institute can be found at: www.wistar.upenn.edu.

Applicants should submit curriculum vitae, brief summary of past and future research interests, and the names of three reference to: **Russel E. Kaufman, M.D., Director, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Phone: 215-898-3774, fax: 215-573-2097, e-mail: Kaufman@wistar. upenn.edu.** EOE/AA/M/F/D/V.

THE WISTAR INSTITUTE



Genomics Institute of the Novartis Research Foundation

GNF, located in the Torrey Pines area of San Diego, CA, is funded by the Novartis Research Foundation and dedicated to the development and application of new methods and techniques for genome-wide biological discovery and biomedical research. GNF provides a unique and challenging opportunity to combine exploratory biomedical research with pharmaceutical drug development in a highly interactive, multidisciplinary environment in a new state-of-the-art laboratory complex. GNF offers excellent compensation and a great benefits package. We are currently recruiting for several positions, including:

BIOSTATISTICIAN/Job Code BSST: We are seeking a candidate with excellent training in Statistics, as shown by an advanced degree in a Statistics discipline, and a demonstrated understanding of applying statistical methods to experiment design and analysis of data derived from molecular biology and genetics technologies. Programming fluency in MatLab, R or S/S-plus is required, as well as statistical experience in microarray data analysis, statistical genetics, and/or high-throughput screening. Experience in population genetics and trait-allele association is a plus. This position will work closely with the Genomics and Mouse Genetics departments, requiring excellent communication skills, independent thinking, and a team-oriented attitude.

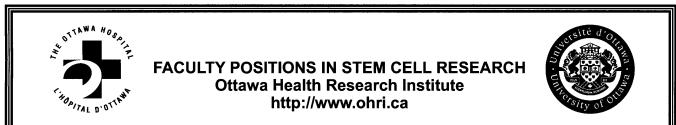
PRINCIPAL INVESTIGATOR/Job Code JCPI: We need a PI with 3+ years' excellent postdoctoral training, a strong publication record, and an innovative biomedical research program addressing key topics in oncology, infectious disease, metabolic and CV disorders, neurological disease, arthritis and bone metabolism, or immunology. Individuals with a strong background in drug discovery in any of these areas, as well as experience in key target areas including GPCRs, kinases or proteases, are encouraged to apply. The position will participate in lead discovery efforts towards identifying novel small molecule therapeutics by exploiting GNF's innovative resources, including ultra high-throughput cell-based screening, genomics and proteomics tools, *in vivo* models and a collaborative mouse ENU mutagenesis program, and includes funding for postdoctoral and research associates.

POSTDOCTORAL ASSOCIATE/Job Code LDPD: Lead Discovery is seeking a Postdoctoral Associate to develop and evaluate technology related to determining the cellular target of compounds structurally related to known kinase inhibitors. A PhD in a discipline such as molecular biology or biochemistry is required, as is extensive knowledge of mammalian signal transduction emphasizing protein kinases and methods used to study their activity. Interaction with groups developing emerging technologies related to drug discovery and drug target identification requires effective communication skills across multiple disciplines.

GROUP LEADER/ASSOCIATE SCIENTIST/Job Code DK: Medicinal Chemistry is seeking a Group Leader and an Associate Director to lead a group of PhD and associate chemists and to be responsible for a drug discovery program. Experience in supervision of chemists is required, and the Associate Director position requires experience in project management. Five to 10 years' experience in drug discovery research, preferably in a major pharmaceutical company, is also required.

Please indicate job code when submitting your CV. Mail to GNF, 10675 John Jay Hopkins Drive, San Diego, CA 92121, fax to 858/812-1670, or submit online to jobs@gnf.org. View details of all of our open positions at www.gnf.org.

Equal Opportunity Employer



Innovative and creative scientists at all levels are invited to apply for faculty positions in the Ottawa Health Research Institute's new Centre for Stem Cell Research. Members will hold appointments at the Assistant or Associate Professor level in the Faculty of Medicine at the University of Ottawa. Candidates using advanced biomolecular technologies to study stem cell biology, such as DNA and protein arrays/genomics, proteomics, or bioinformatics are particularly encouraged to apply.

The successful applicants will be expected to conduct a vigorous program of independent, externally funded research and to teach at the graduate level. Candidates must have a PhD or equivalent degree and postdoctoral experience demonstrating outstanding achievement in their field. Applicants should forward a CV, copies of representative reprints, statement of research interests, and arrange to have three letters of reference sent to:

Dr. Michael A. Rudnicki, Senior Scientist & Director Molecular Medicine Program, Ottawa Health Research Institute 501 Smyth Road Ottawa, Ontario, Canada, K1H 8L6

In accordance with Canadian immigration regulations, this advertisement is directed in the first instance to Canadian citizens and landed immigrants, however, applications from individuals of other nationalities will also be considered.



Faculty Positions Department of Pharmacology The University of Michigan

The Department of Pharmacology is seeking applications for three tenure-track positions at the **ASSIS-TANT** or **ASSOCIATE PROFESSOR** level. We are seeking outstanding individuals with research experience and interests that augment current department initiatives in *Cardiovascular Pharmacology, Cancer Pharmacology,* and *Pharmacogenetics.* Qualifications include a Ph.D. in Pharmacology and/or M.D. degree, 3-5 years of postdoctoral experience, and research accomplishments as evidenced by scholarly contributions to the literature.

For the Cardiovascular Pharmacology position, consideration will be given to applicants having documented experience with *in vivo* and *in vitro* experimental models in therapeutic areas of cardiac electrophysiology, thrombosis, myocardial ischemia, inflammation and heart failure as well as an ability to employ molecular, biochemical and functional assays to elucidate drug mechanisms and potential therapeutic applications. For the Cancer Pharmacology position, applicants with interests in signaling events in response to DNA damage and other cellular stresses or regulation of the cell cycle as it relates to response to chemotherapeutic agents are encouraged. For the Pharmacogenetics position, consideration will be given to applicants with experience in the identification and characterization of polymorphic genes encoding xenobiotic metabolizing enzymes/transporters or involved in their regulation in animals or man. Applicants with outstanding backgrounds in Phase I/Phase II drug metabolism are also encouraged.

Successful candidates will be expected to establish an externally funded research program and to participate in teaching medical students and other health professionals, as well as graduate and postdoctoral students. An attractive startup package including excellent laboratory facilities and generous startup funds will be available.

Information about current faculty interests is available at http://sitemaker.umich.edu/pharmacology/ pharmacology.people/faculty.

Applicants should send their curriculum vitae, a two- to four-page summary of their research program and future research plans, and information related to past and current teaching experience. Three letters of recommendation should also be sent. Address all correspondence to: Dr. Paul F. Hollenberg, Chair, Pharmacology Search Committee, Department of Pharmacology, The University of Michigan Medical School, 1150 West Medical Center Dr., Ann Arbor, MI 48109-0632.

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

Supervisory Research Plant Pathologist/ Research Geneticist (Plants)

The USDA, Agricultural Research Service. National Clonal Germplasm Repository for Citrus and Dates located on the campus of the University of California at Riverside, CA, invites applications for the position of Research Leader, GS-13/14/15 (\$68,944 to \$124,588 per annum, salary commensurate with experience). Serves as manager for the Repository whose mission is to collect, maintain, evaluate and distribute germplasm of citrus, related genera, and date palms and to perform related research. Conducts independent research for either plant pathogen detection, elimination, tolerance, resistance/susceptibility, epidemiology, disease characterization or utilizing population genetics related to germplasm for evaluation, selection, collection and maintenance. Research objectives are to develop new, improved techniques to detect and identify the causal agents associated with these diseases, and create approaches that may induce resistance to these pathogens (e.g., induced systemic acquired resistance, gene silencing). A Ph.D. or equivalent in Plant Pathology or Plant Genetics (Molecular Biology) or a closely related field is desired. This is a competitive, permanent appointment and U.S. Citizenship is required. For information on the position contact Dr. Michael Shannon, (510) 559-6071 or email: mshannon@pw.ars.usda.gov. Information about application procedures may be obtained via ARS website: http://www.afm.ars.usda.gov/divisions/ hrd/vacancy/resjobs/X3W-3019.HTM while information about the Riverside Location is available at http://pwa.ars.usda.gov/riverside/ index.shtml. Applications must be postmarked by December 31, 2002.

> USDA-ARS is an Equal Opportunity Provider and Employer.



The Agricultural Research Service, Plant Sciences Institute, Systematic Entomology Laboratory in Beltsville, Maryland is seeking a permanent **RESEARCH ENTOMOLOGIST**, GS-12/13 with promotion potential. Salary is commensurate with experience (salary range GS-12: \$55,694 - \$72,400 and GS-13: \$66,229 - \$86,095 per annum), plus benefits. U.S. citizenship is required. Incumbent will plan and conduct research that will characterize agriculturally important aphids and related taxa by analyzing the morphology, biology, and molecular characters necessary to describe, identify, and relate the species to one another.

Position requires education in entomology, plus:

- Knowledge of the principles, practices and techniques of entomology;
- Knowledge of rules of nomenclature, cladistics, and other principles of systematic biology;
- Skill in analyzing molecular and morphological characters of insects; and
- (4) Skill in designing, planning, and conducting research, and publishing results in peer-reviewed journals.

For research information, contact **Dr. Michael Schauff** at **301**-**504-5183**. Candidates must request a copy of vacancy announcement **ARS-X3E-3002** by either calling **301-504-1482** or via **www.afm.ars.usda.gov/divisions/hrd/index** in order to address specific information outlined in the vacancy announcement. Applications must be postmarked by **December 2, 2002**.

USDA/ARS is an Equal Opportunity Provider and Employer.

Chair, Department of Microbiology and Cell Science College of Agricultural and Life Sciences, University of Florida

The University of Florida College of Agricultural and Life Sciences invites applications and nominations of outstanding scientists and educators for the position of Chair, Department of Microbiology and Cell Sciences at the University of Florida. The successful candidate is expected to lead an established, productive department that serves interdisciplinary research initiatives, along with undergraduate and graduate education, in the molecular biological sciences. Important qualifications include the ability to translate previous experience in research, education, and administration to achieve excellence in a basic research program that serves as a platform for fundamental and applied research initiatives. Candidates must have an active federally funded research program, strong leadership skills, and meet the criteria for appointment at the rank of Full Professor. The Chair will have an opportunity to direct recruitment of new faculty and contribute to the development of a strong university-wide program in biological sciences.

The University of Florida is a Land-Grant Institution and the largest campus within the Florida State University System. The Department, housed in a new building, includes 15 faculty members with established graduate research programs in Microbial Physiology/Biochemistry/Genetics and Immunology/ Pathogenesis, funded with more than \$10 million from extramural grants and contracts and private donations. Departmental facilities include molecular biological, biochemical, and imaging technologies for genomic and proteomic investigations. Centralized facilities support investigations in structural biology. An undergraduate major serves pre-professional students registered within the Colleges of Agricultural and Life Sciences and Liberal Arts and Science. Further details may be obtained at http://microcell.ufl.edu.

Review of applications will begin immediately and continue until the position is filled. Direct nominations or letters of application, curriculum vitae, and names, addresses and e-mail addresses of five references to: Dr. Gail C. Wisler, Chair, Department of Plant Pathology, P.O. 110680, University of Florida, Gainesville, FL 32611; Phone 352-392-3631 X210; FAX: 352-392-6532 e-mail: gcwisler@mail.ifas.ufl.edu. Digitized submissions are encouraged.

The University of Florida is an Equal Opportunity, Equal Access, and Affirmative Action Employer. Minority and women candidates are encouraged to apply.

ASSISTANT PROFESSOR ARTHROPOD BIODIVERSITY University of California, Berkeley

The University of California, Berkeley, invites applications for a tenure-track Assistant Professor in arthropod biodiversity with concurrent appointment in the Agricultural Experiment Station. The successful applicant will be expected to establish an active research program in any area of biodiversity science, including, but not limited to the use of systematic and ecological approaches to understand arthropod biodiversity and conservation. The appointment will be for nine months, with salary and step within rank dependent on experience, qualifications, and budgetary approval. The position will be available July 1, 2003. Applicants must have earned a doctoral degree in a field appropriate for the study of arthropod biodiversity, and will be expected to develop a vigorous externally funded research program, direct student research, and contribute to both undergraduate and graduate instruction. Responsibilities will include the development of courses in biodiversity and/or conservation biology, and significant interactions with the Essig Museum of Entomology, which is part of a strong consortium of natural history museums at the University of California at Berkeley. Interested persons should apply by submitting a résumé, statement of research interests, list of publications, and the names and addresses of three references to: Professor Rosemary Gillespie, Chair of Search Committee, University of California, Department of Environmental Science, Policy, and Management (ESPM), Division of Insect Biology, 201 Wellman Hall, Berkeley, CA 94720-3112. The closing date for applications is February 1, 2003.

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

THE UNIVERSITY of EDINBURGH



SCIENCE and ENGINEERING

REGIUS CHAIR OF PLANT SCIENCE

Based in the School of Biological Sciences (SBS), you will develop a strong individual programme of research in molecular plant science, provide a focus and leadership for other members of the School working in plant science and innovative leadership in the teaching of plant science.

Plant science research in the School spans a broad area, with particular strengths in plant biochemistry, molecular biology and population genetics. In addition, strong links are maintained with the Royal Botanic Garden Edinburgh, which has particular research strengths in plant taxonomy and evolutionary studies. The plant scientist community in SBS is located in the Daniel Rutherford Building, which is currently undergoing major refurbishment and will provide excellent facilities for plant research. All parts of SBS were graded 5 in the recent Research Assessment Exercise.

Further information may be obtained by contacting Professor A. J. Trewavas. Tel: 0131 650 5328. E-mail: trewavas@ed.ac.uk or Professor D. J. Finnegan, Head of the School of Biological Sciences. Tel: 0131 650 5525. E-mail: david.finnegan@ed.ac.uk

The appointment will be made in the professorial salary range.

Please quote REF: 311895SI. Closing date: 29 November 2002.

Apply online, view further particulars or browse more jobs at our website. Alternatively, telephone the recruitment line on 0131 650 2511.

Committed to Equality of Opportunity

www.jobs.ed.ac.uk

DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

Job Opportunities

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes. The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
 Psychophysics
- PsychophysicsBiochemistry
- Cell Biology
- Immunology
- Genetics

Salaries range from \$30,800 to \$125,700 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits. Candidates interested in specific job opportunities at the NEI may visit the NEI web site at http://www.nei.nih.gov/ listing the most current positions available.



NIH/NEI is an Equal Opportunity Employer



Department of Health and Human Services National Institutes of Health National Institute of Allergy and Infectious Diseases

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health (NIH) and those of NIH's research Institutes.

The National Institute of Allergy and Infectious Diseases (NIAID), a major research component of the NIH and the Department of Health and Human Services, is recruiting for a Postdoctoral position to conduct a research in Fc signaling mechanisms in mast cells. The individual selected for this position will focus primarily on regulation of gene expression and degranulation.

The successful individual will possess an M.D. or Ph.D. degree in immunology, molecular biology, protein biochemistry or cell biology, and have research experience preferably in transfection of primary cultures and cell lines. Please email or send a cover letter, curriculum vitae, and names/contact details of three referees to: Alasdair M. Gilfillan, Ph.D., LAD/NIAID/NIH, Bldg. 10, Rm. 11C205, 10 Center Drive, MSC 1881, Bethesda, MD 20892-1881, USA. Salary is commensurate with research experience and accomplishments. Application deadline: December 31, 2002. Email: agilfillan@niaid.nih.gov.





DHHS and NIH are Equal Opportunity Employers

Nature Publishing Group

Senior Editor

Nature Biotechnology, the premier journal for biotechnology research serving the scientific community, is seeking a senior editor to join its New York City office.

The Senior Editor has responsibility for planning, commissioning, and editing feature and review articles. He/she also oversees many other parts of the journal. Frequent travel to international meetings and conferences will be required to maintain a close relationship with the biotechnology community.

Applicants should have a strong background in journalism and writing either as a freelancer and/or coordinating the editorial content of biotechnology publications; excellent literary skills; an enthusiasm for and commitment to the communication of science; and an appreciation of the history and evolution of molecular biology into biotechnology. Close contacts and familiarity with the biotechnology field are essential, including an ability to understand primary research and a strong interest in the business and financial aspects surrounding research.

To apply, please submit a CV (including current salary), a summary of recent clippings, an outline for a feature article on an exciting recent development in any area of biotechnology, a criticism of the strengths and weaknesses of *Nature Biotechnology's* current feature section, and three ideas for future features.

News Editors

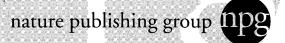
Nature Biotechnology and *Nature Medicine* are each seeking a News Editor to join the New York City office.

News editors determine which stories from the scientific community are most relevant for the journals' monthly news section, commission and edit stories from a team of freelance writers around the world, and also report and write articles. They also contribute other content, such as Editorials, Commentaries and Reviews, and write press releases for the relevant journal. The position requires frequent attendance at meetings and conferences, familiarity with the international scientific community and press, and an ability to foster a close relationship with the world's leading experts.

Successful candidates will have journalism experience and outstanding writing and oral communication skills. They should be independent and able to run a News section autonomously, with an innate appreciation of cutting-edge topics in research and its social, ethical, financial, and political aspects. Candidates for *Nature Medicine* are required to have completed a PhD in biomedical research. Those who wish to apply for position at *Nature Biotechnology* should also have a working knowledge of the business aspects surrounding life science ventures.

To apply, please submit a curriculum vitae, a concise cover letter explaining your interest in the post, a 600-word news story on a relevant topical issue, a sample list of 6 news stories for an issue, and any recent articles you have written.

Please send completed applications NO LATER THAN NOVEMBER 15th to: Nature Publishing Group, Human Resources Department, 345 Park Avenue South, 10th Floor, New York, NY 10010; Fax: (212) 696-9594 or Email: admin@natureny.com.



The Macmillan Building, 4 Crinan Street, London, N1 9XW, UK T +44 (0)20 7833 4000



HIGH THROUGHPUT BIOLOGY CENTER JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

The High Throughput Biology Center (HIT Center) at Johns Hopkins University School of Medicine is seeking a Tenure Track Assistant Professor. The HIT Center is interdisciplinary and interdepartmental and will occupy space in a new building in the fall of 2003. State of the art genomics, proteomics, and compound screening facilities will be an integral part of the Center. Its research focus is the thoughtful application of high throughput methods to answer well-defined biological questions. We seek a colleague with a hypothesis-driven research program that uses high throughput or computationally intensive methods. Candidates in the following areas are encouraged to apply:

- Chemical Biology
- Computational Biology
- Functional Genomics
- High throughput imaging or phenotyping
- Proteomics Single molecule analysis

The successful candidate will be given a primary appointment in one of the Basic Science Departments.

Candidates should send a CV, Research Plan, and four letters of recommendation to: Jef Boeke, Director, HIT Center, 617 Hunterian, 725 N. Wolfe St., Baltimore MD 21205, by January 1, 2003

Department of Laboratory Medicine and Pathobiology

Two Faculty Positions

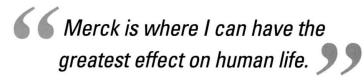
The Department of Laboratory Medicine and Pathobiology, Faculty of Medicine, University of Toronto (http://www.utoronto.ca/ LabMedPathobiology) is seeking applicants for two full-time faculty positions either non-tenure or tenure-stream at the rank of Assistant Professor available July 1, 2003. We are particularly interested in individuals working in one of the following two areas: (1) cellular and molecular mechanisms of disease; (2) molecular and biochemical mechanisms of microbial disease, including virology and parasitology. Candidates must have an MD or a PhD degree or equivalent, have completed significant postdoctoral training, and have an established track record of high quality research. Exceptional candidates with established funded research programs and a rank of Associate or Full Professor may be considered as well. Teaching experience at the undergraduate and graduate level is an important asset.

The successful candidate is expected to participate actively in graduate and undergraduate teaching programs, maintain a well-funded, independent research program and interact with other investigators at the University campus and the major affiliated teaching hospitals.

Applicants should submit curriculum vitae, description of their research accomplishments and the focus of their planned research program and the names of three referees by 15 January 2003 or until the positions are filled, to the Chair, Academic Search Committee, Department of Laboratory Medicine and Pathobiology, Faculty of Medicine, University of Toronto, Room 110, 100 College Street, Toronto, Ontario, Canada, M5G 1L5.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.



Merck Research Laboratories (MRL), a world leader in creative and innovative biological and pharmaceutical research to produce novel medicines, is recruiting a limited number of excellent scientists for our metabolic disease programs in Rahway, New Jersey.

Research Scientists in Metabolic Diseases

MRL is seriously committed to the development of therapies for the treatment of metabolic diseases, including diabetes, obesity, and atherosclerosis. We are looking for outstanding scientists who are interested in applying their skills to identify new targets for therapeutic intervention, and who would like to participate in drug discovery and development in a strong multidisciplinary environment using state-of-the-art technologies.

Qualified candidates must possess a Ph.D. or M.D., with a minimum of two years of post-doctoral research experience in biochemistry, diabetes, obesity, lipid research, or central nervous system pathways involved in energy metabolism. Equally important is a superlative record of accomplishment demonstrated by a strong publication record. Superior interpersonal skills, leadership potential, and the ability to thrive in a team environment are required. We are looking for candidates who share our core research values in the development of innovative medicines for the treatment of metabolic disease.

We offer an excellent salary and comprehensive benefits package, as well as opportunities for professional growth. Further information about our research environment can be found at our web site: **www.merck.com/mrl**. Interested applicants should send their CV electronically (including names and addresses for three potential references) to: **mary_ann_ohalloran@merck.com**. We are an Equal Opportunity Employer, M/F/D/V.





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At Merck, our first priority is improving the quality of life for people around the world. People who use our products. People who develop them. People like you. Join us in making a world of difference

Invitrogen Where dynamic growth creates multiple R&D opportunities

Invitrogen, a market leader in supplying tools for life science research has the following opportunity:

MANAGER OF RESEARCH AND DEVELOPMENT

As Manager of R&D, you will build and lead a team to extend our product line supporting protein chemistry and proteomics research. You'll focus on developing products to facilitate analysis of proteins by mass spectrometry, electrophoresis and chromatography. Requires a Ph.D. in Chemistry or Biochemistry with at least 7 years of experience beyond the degree in isolation and characterization of proteins. Must have a track record in creative problem solving as indicated by patents or methodology improvements, and extensive experience in the use of MS techniques for protein analysis. Experience in managing a scientific team and in the development of commercial products is preferred.

We are looking for motivated individuals who are eager to join an exciting, growing company. Please e-mail your resume to: resumes@Invitrogen.com or mail/fax to: Invitrogen Corporation, HR, 1600 Faraday Ave., Carlsbad, CA 92008. Fax: 760-602-6600.EOE/M/F/D/V.



Cincinnati Children's Hospital Medical Center

Tenure-track Assistant or Associate Professor

The cell signaling program in the Division of Experimental Hematology, Cincinnati Children's Research Foundation, invites applications for an **Assistant** or **Associate Professor** position. We are seeking candidates carrying out molecular/cellular studies to understand the mechanistic aspects of intracellular signaling networks. Preferences are given, but are not limited, to the areas of research that complements existing strength of the division (www.cincinnatichildrens.org/Research/Divisions/ Experimental_Hematology/default.htm).

The rapidly growing Division of Experimental Hematology (**D. A. Williams**, Director) and the Cell Signaling Program (**Y. Zheng**, Director) offers highly stimulating research environment and an excellent start-up package. The successful applicant will be expected to establish an active, independent and externally funded research program and to contribute to programmatic development of the division. Graduate faculty appointment in several excellent graduate programs of the University of Cincinnati is possible. Interested applicants please forward a cover letter, a CV, a statement of research interests, and contact information of three references before January 15, 2003 to: Ms. Kerry Holleran, kerry.holleran@chmcc.org.

Cincinnati Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.



DEPARTMENT OF BIOCHEMISTRY University of Utah School of Medicine

A tenure-track faculty position is available for autumn 2003 in the general areas of structural or mechanistic biochemistry. We are looking for strength and originality in the characterization of biological macromolecules and elucidation of their mechanisms of action.

Applicants should hold a Doctoral degree and have a strong record of research accomplishment. Preference will be given to applicants at the level of **ASSIST-ANT PROFESSOR**, but candidates at senior ranks will also be considered. The successful candidate will join an interactive and diverse faculty and will participate in campuswide training programs.

Send curriculum vitae, a statement of research background and interest, and three letters of recommendation to:

Dr. Dana Carroll Faculty Search Committee Department of Biochemistry 50 North Medical Drive, Room 211 Salt Lake City, UT 84132 U.S.A.

The application deadline is December 1, 2002. Late applications will be considered if an opening is still available. The University of Utah is an Equal Opportunity/ Affirmative Action Employer, encourages nominations and applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and Employees.

TROPICAL ECOLOGY OR FORESTRY

The Pacific Southwest Research Station of the U.S. Department of Agriculture Forest Service is reopening its search for an internationally recognized Scientist to direct its Institute of Pacific Islands Forestry in Honolulu, Hawaii. The **DIRECTOR** will provide the vision, leadership, and coordination for the Forest Service's programs in research and development, state and private forestry, and international programs in Hawaii and U.S.-affiliated islands in the Pacific. Current research programs and technical assistance target invasive species, wetlands, and forest restoration. The Director will conduct research as a member of one of these teams. Salary range is \$82,580 to \$107,357 plus 25% cost-of-living allowance. Applicants must be U.S. citizens. A vacancy announcement that includes required qualifications and application procedures is available on the USA Jobs website: http://www. usajobs.opm.gov and from: Personnel Manage-ment, PSW Research Station, P.O. Box 245, Berkeley, CA 94701, Attention: Pat Steverson. Telephone: 510-559-6300; FAX: 510-559-6352; e-mail: psteverson@fs.fed.us. Refer to PSW-Demo-599-02. Deadline for receipt of applications is December 30, 2002. Questions regarding the position should be directed to: Julie S. Denslow; Telephone: 808-933-8121, Extension 16; e-mail: jdenslow@fs.fed.us. USDA is an Equal Opportunity Employer.

The University of Washington's Department of Bioengineering invites applications for a new TENURE-TRACK FACULTY position. Applicants are sought throughout the Department's research programs in biomaterials, tissue engineering, nanotechnology, medical imaging, drug delivery, molecular bioengineering, BioMEMs, and computational bioengineering (website: http://depts.washington.edu/bioe). Applications in other areas representing future opportunities are also encouraged. Applicants should include curriculum vitae, a proposed research program, and contact information for five references to: Professor Patrick Stayton, c/o Heather White, Department of Bioengineering, Box 357962, University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

TWO TENURE-TRACK ASSISTANT PROFESSOR POSITIONS Microbiologist and Cell Biologist

The Department of Biology at California State University, Fresno, seeks broadly educated applicants in the fields of microbiology and cell biology for tenure-track teaching and research appointments beginning August 2003. Preferred specializations for the microbiology candidate are pathogenesis and/or epidemiology. Normal teaching responsibilities for this position would include introductory microbiology, medical microbiology, and undergraduate and graduate courses in area of expertise. Preference will be given to candidates able to teach microbial genetics. Special consideration will be given for the research interests involving ecological or agricultural applications. Preferred specializations for the cell biology candidate are signal transduction (including cell cycle and cancer cell biology) or membrane biology with a neurobiology emphasis. Normal teaching responsibilities for this position would include an undergraduate course and a graduate course in the candidate's specialty; participation in one majors core course, e.g., cell biology or genetics, is expected. Pref-erence will be given to candidates with cell/tissue culture expertise. Specific teaching assignments for either candidate will depend on departmental needs. The successful candidates must each develop a research program that involves both undergraduate and Master's-level graduate students and pursue the external funding necessary to sustain their programs. The Biology Department participates in the graduate-level, interdisciplinary Biotechnology Certificate Program that offers both teaching and collaborative opportunities. Additional collaborative opportunities are available through both the local medical community (including the faculty associated with the UCSF Medical Education Program in Fresno) and local agricultural and veterinary medicine organizations (including the regional U.S. Department of Agriculture/Agricultural Research Service laboratories and both University of California-Davis and University of California-Riverside-affiliated research laboratories and field stations). Applicants must have a Ph.D. in an appropriate field and scholarly accomplishments commensurate with experience; strong preference will be given for postdoctoral experience. Before applying, read more detailed vacancy announcements and request forms at website: http://www.csufresno.edu/ aps/vacancy/vacancy.html. Submit the official application with curriculum vitae, e-mail address, statements describing teaching and research plans, transcripts, and three letters of reference forwarded directly to either: Microbiologist Search Committee Chair, Dr. Shirley Kovacs, or Cell Biologist Search Committee Chair, Dr. Alejandro Calderon-Urrea, Department of Biology, California State University, Fresno, 2555 East San Ramon Avenue, Fresno, ČÁ 93740-8034. For full consideration, have application submitted by January 15, 2003. Affirmative Action/Equal Opportunity Employer.

ANIMAL PHYSIOLOGIST/CELL BIOLOGIST

The Department of Zoology at Weber State University invites applications for a tenure-track **ASSIST**-**ANT PROFESSOR** position to begin fall 2003. Teaching includes human biology, human physiology, and upper-level cell biology. See website: http://departments.weber.edu/zoology for details. Ph.D. required. Research involving undergraduates is expected. Send curriculum vitae, statements of teaching and research interests, up to three reprints, and three reference letters to:

> Dr. Gloria Wurst Department of Zoology c/o Human Resources Weber State University Ogden, UT 84408-1016 E-mail: gwurst@weber.edu

Application deadline is November 25, 2002. Weber State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS OPEN

The Department of Pharmaceutical Sciences is seeking applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. Applicants must possess an earned Ph.D. and postdoctoral experience in biomedical sciences. Responsibilities include teaching undergraduate courses in pharmacology/toxicology, graduate courses in area of specialty, establishment of an active research program, and mentoring graduate students. The Department possesses excellent facilities and support service for research. Mod-ern instrumentation, AAALAC-accredited facility, and tissue culture laboratories are available. Application letters with curriculum vitae, statement of research interests, and three letters of reference should be sent to: St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439. E-mail: employment@stjohns.edu. St. John's University is an Equal Opportunity Employer and encourages applications from women and minorities.

ASSISTANT PROFESSOR Department of Neurobiology Stanford University School of Medicine

The Department of Neurobiology invites applicants for the position of Assistant Professor. Preference will be given to applicants using innovative molecular, genetic, and/or cellular approaches to fundamental aspects of nervous system function or development. This tenure-track position offers outstanding scholarly and scientific resources and the opportunity to teach graduate and medical students with strong interest in neurobiology. The Department has a long tradition of excellence in neuroscience and is a focal point for interdisciplinary neuroscience research and teaching at Stanford. Applicants should submit curriculum vitae; bioliography; a brief (less than 500 words) description of research interests; and the names and addresses of three references (electronically if possible) no later than January 16, 2003, to:

U. Jack McMahan Chair, Search Committee Department of Neurobiology Stanford University School of Medicine 299 Campus Drive Stanford, CA 94305-5125 E-mail: skluge@stanford.edu

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

DEVELOPMENTAL BIOLOGY

The Department of Zoology is seeking to fill a tenure-track ASSISTANT PROFESSOR position in the area of developmental biology. The successful applicant will be expected to maintain an active research program, seek extramural funding, supervise student research, participate in teaching graduate and undergraduate courses, and perform service to the University and profession. The Department has stateof-the-art facilities for using molecular, cellular, and whole organism techniques and offers competitive start-up funds. The Department has 35 faculty, over 50 Ph.D./M.S. students, and approximately 1,000 majors (website: http://zoology.muohio.edu/). Miami University (enrollment 21,000) is rated nationally as a highly selective public university. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: Dr. Douglas Meikle, Chair, Department of Zoology, Miami University, Oxford, OH 45056. Review of applications will begin on 1 December 2002 and continue until the position is filled. Ph.D. required. Position available August 2003. Telephone: 513-529-3100; e-mail: meikled@muohio.edu for more information. Miami University offers Equal Opportunity in Employment and Education.

It's all about health. Because health matters.

The study of gene expression using cDNA microarray chips holds great promise for toxicology as a tool for predicting target organ toxicity and elucidating molecular mechanisms. Sanofi Synthelabo is conducting studies investigating the relationship between gene expression and hepatoxicity. In support of this project, Sanofi-Synthelabo is looking to fill a post-doctoral research position with an individual possessing a PhD in Molecular Biology.

Post-Doctoral Research Scientist -Molecular Toxicology

Qualified individual will take on the following responsibilities:

- In vivo studies: Conduct in vivo experiments characterizing gene expression changes in liver tissue following exposure to selected hepotoxins using cDNA microarrays. Compare temporal and spatial relationships of gene expression changes to standard measures of hepatoxicity, such as clinical pathology and histomorphology in order to understand which molecular changes are associated with toxicity.
- Bioinformatic analyses: Analyze gene expression data from in vivo experiments utilizing data management and cluster analysis software. Characterize pathways in which the altered genes participate (using the literature and Internet-based gene databases) to assess the biological role of the genes whose expression has been altered.

Sanofi-Synthelabo offers a team-oriented, challenging work environment with opportunities to grow and excel. We offer competitive compensation and an excellent benefits package, which includes medical/dental/vision/life insurance coverage, 401(k), pension plan, tuition reimbursement, flex time, business casual attire and much more. Be a part of our innovation and success. For confidential consideration, please forward your resume and salary requirements, noting Job Code GV02-84, to: **Human Resources, Sanofi-Synthelabo Research, 9 Great Valley Parkway, Malvern, PA 19355. Fax: 610-889-8850.** Equal Opportunity Employer, M/F/D/V.

sanofi~synthelabo

FD MAYO CLINIC

Hematologist Oncologist Rochester, Minnesota

The Department of Hematology and Internal Medicine is seeking a **BC/BE Hematologist Oncologist** with laboratory-based research experience related to multiple myeloma, with particular focus on bone marrow microenvironment and bone marrow angiogenesis. Laboratory experience in the use of replicating viral vectors for cancer therapy is desirable. The applicant must be experienced in clinical trial design and conduct and in the care of patients with multiple myeloma and amyloidosis. The individual should have a proven track record in blood and marrow transplantation related research. Formal training in clinical research is a requisite.

Salary will be determined by the successful candidate's experience. There is an attractive benefits package. Mayo Clinic Rochester is a non-profit, physician led, clinical practice integrated with education and research in a unified multi-campus system.

Submit curriculum vitae and copies of first authored publications to:

Dr M.A. Gertz Department of Hematology and Internal Medicine Mayo Clinic 200 First Street SW Rochester, MN 55905

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTES OF HEALTH NATIONAL HEART, LUNG, AND BLOOD INSTITUTE <u>Tenure -Track Position</u>

The Laboratory of Kidney and Electrolyte Metabolism (LKEM), National Heart, Lung, and Blood Institute, is recruiting a Tenure-Track Scientist with expertise in renal physiology and epithelial transport physiology. The successful candidate should have a PhD, MD or MD/PhD with training in physiology, biomedical engineering, biochemistry, molecular biology, or a related discipline. Experience in ion transport physiology in renal tubule epithelia is particularly desirable. Possible areas of specialization include use of heterologous expression systems to study ion transporters, application of large scale genomics techniques to the study of ion transport regulation, application of proteomics methodologies to study ion transport regulation, development of gene knockout models to study regulation of salt and water excretion by the kidney. LKEM has a long history of technological innovation and a candidate is sought who can continue this tradition.

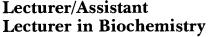
The successful candidate will be offered a competitive salary commensurate with experience and qualifications. Appointees must be U.S. citizens, resident aliens, or non-resident aliens with a valid employment visa.

Applicants should send a descriptive letter of interest, curriculum vitae and bibliography, and arrange for three letters of reference to be sent to: Mo Christian Fisher, Human Resources Branch

Ms. Christine Fisher, Human Resources Branch DHHS, NIH, National Heart, Lung, and Blood Institute 31 Center Drive, MSC 2484 Bethesda, MD 20892-2484

Please include vacancy identifier, **HL-02-0120** on all correspondence. Applications must be received no later than **January 8, 2003**. HHS and NIH are Equal Opportunity Employers. Applications from women, minorities, and persons with disabilities are strongly encouraged.

THE UNIVERSITY OF THE WEST INDIES CAVE HILL, BARBADOS Lecturer/Assistant





Applications are invited for the post of Lecturer/Assistant Lecturer in Biochemistry. Applicants should ideally have a first degree in Biochemistry and a PhD in Biochemistry and Molecular Biology along with some experience of formal lecturing and supervision of undergraduate practical classes.

The successful applicant for this post will be expected to assume duties as soon as possible.

Detailed applications (three copies) giving full particulars of qualifications and experience, biodata and the names and addresses of three referees should be sent to the Campus Registrar, University of the West Indies, PO Box 64, Bridgetown, Barbados. Telephone: (+1 246) 417-4067/8; E-mail: human resources@uwichill.edu.bb; Fax (+1 246) 417 0330. To expedite the appointment procedure applicants are advised to request their referees to send references under confidential cover direct to the Campus Registrar without waiting to be contacted by the University. Further particulars for this post, including remuneration package are available on request. These particulars may also be obtained from the Association of Commonwealth Universities (50355), 36 Gordon Square, London WC1H 0PF, UK (email: adverts@acu.ac.uk; fax: 020 7383 0368. tel: 020 7380 6706) or visit the University's website at http://www.uwichill.edu.bb/.

BIOTECHNOLOGY PROGRAM DIRECTOR Florida Gulf Coast University

The Whitaker Foundation has generously provided funding to hire five faculty to jump start an undergraduate program in biotechnology. The College of Arts and Sciences seeks a Biotechnology Program Director to provide leadership for the development and implementation including teaching of the biotechnology program. This person will be involved in the recruitment and hiring of other biotechnology faculty.

Florida Gulf Coast University (FGCU), located between Ft. Myers and Naples, is part of the Florida State University System. Opened in August 1997, it is committed to creating learning-centered programs and to thinking in new ways about teaching and learning. FGCU is a comprehensive university and emphasizes undergraduate research experience for students. The biotechnology program is housed in the Whitaker Center for Science, Math, and Technology Education. The Center's purpose is to build a model undergraduate program with a first-rate education for students seeking research and professional careers. We encourage going outside traditional boundaries and support bringing new ways of thinking to improving the 'doing' as well as the teaching of science. The Biotechnology Director will implement ideas for changes that have been impossible in more established, traditional institutions.

Requires Ph.D. from an accredited institution in a biotechnology-related field; **PROFESSOR** rank or equivalent credentials; commitment to undergraduate education and research; outstanding record of achievement in a biotechnology field (prefer plants, environmental, marine).

Special position notes: Appointment will be made at a faculty rank and salary commensurate with the candidate's qualifications on a nine-month, multiyear appointment basis. The anticipated start date of January 2003 is negotiable. Application packages including additional materials submitted such as videos, tapes, slides, books, etc., are subject to public review under Florida's Public Records law; shall become the property of FGCU; and can not be returned.

To apply, submit two packages (one original and one photocopy) to: Florida Gulf Coast University, Position Number 1116930679, Human Resources, 10501 FGCU Boulevard South, Ft. Myers, FL 33965-6565. Each package must include a letter of interest, curriculum vitae, and a list of five references. Finalists will be required to provide official transcripts. Deadline is open until filled (review of application materials will begin November 18, 2002). Visit our website: www.fgcu.edu http://admin.fgcu.edu/ stathtml/hr/category.html or call the 24-hour Job Line, Telephone: 941-590-1111, for additional information.

FGCU is an Equal Opportunity/Equal Access/Affirmative Action Institution and is committed to cultural, racial, and ethnic communities and encourages women and minorities to apply. It is expected that successful candidates share this commitment.

ASSISTANT PROFESSOR Department of Neurobiology

The Department of Neurobiology at the University of Alabama at Birmingham (UAB), School of Medicine, invites applications for a nontenure-track position at the Assistant Professor level. The Department is seeking an outstanding individual who has at least three years of postdoctoral experience with methods for analyzing teen parent/child interactions and maternal neglect. The successful candidate will either have or be competitive for NIH funding for K-type awards and be highly versed in statistical analysis and experimental design in the social and behavioral sciences. Strong interaction/communication skills with a broad neuroscience research community are essential. Send curriculum vitae; statement of research plans; and have three letters of recommendation sent to: Dr. Michael Friedlander, c/o Robin Lucas-Biles, Department of Neurobiology, 1719 Sixth Avenue South, CIRC 516, University of Alabama at Birmingham, Birmingham, AL 35294 by March 15, 2002. UAB is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BEHAVIORAL NEUROSCIENCE (ALL RANKS) University of Michigan

The Department of Psychology and the Neuro-science Program at the University of Michigan invite applications for a tenure-track position in behavioral neuroscience to begin January 2004. This position is part of a Universitywide neuroscience initiative intended to increase overall strength in the field of neural plasticity, broadly defined. For the present position, we seek applicants with a primary interest in the neural bases of experience-dependent plasticity including brain mechanisms involved in learning, memory, and other cognitive functions. Individuals who combine state-of-the-art neuroscience and/or molecular genetic approaches with the analysis of behavior using nonhuman animal models or imaging techniques with humans are especially encouraged to apply. Duties include undergraduate and graduate teaching and the development of a vigorous research program. The appointment could be at any rank (AS-SISTANT, ASSOCIATE, or FULL PROFES-SOR), so all interested persons regardless of seniority should apply. In application, send curriculum vitae; a statement of research and teaching interests (include evidence of teaching ability if available); and letters of reference to: Chair, Behavior Neuroscience Search Committee, Department of Psychology, 525 East University Avenue, Ann Arbor, MI 48109. An Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK FACULTY POSITIONS Program in Development, Cell, and Neurobiology

Louisiana State University Health Sciences Center New Orleans

The Program in Development, Cell, and Neurobiology (website: http://www.cellbiology. lsuhsc.edu/dcn/dcn.htm) invites applications for two faculty positions at the ASSISTANT PROFES-SOR level. We are seeking individuals with cellular, molecular, and/or genetics expertise and research interests in any aspect of developmental biology or developmental neurobiology. Applicants must have a Ph.D. and postdoctoral experience. Successful candidates will develop an independent but interactive research program and participate in the teaching of team-taught cell biology and histology for health professionals and in graduate courses. To apply, please send curriculum vitae, statement of research interests, and the names of three references to: Dr. Reha Erzurumlu, Chair of the Faculty Search Committee, Program in Development, Cell, and Neurobiology, Box P6-2 Louisiana State University Health Sciences Center, 1901 Perdido Street, New Or-leans, LA 70112-1393. LSUHSC is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE DIRECTOR Peptide Synthesis Resource

The HHMI Biopolymer/W.M. Keck Foundation Biotechnology Resource Laboratory in the Yale University School of Medicine seeks an M.S.- or Ph.D.level Peptide Chemist with extensive experience with Fmoc peptide synthesis, reverse phase HPLC purification, and characterization of synthetic peptides. The Keck Laboratory (website: http://info.med. yale.edu/wmkeck/) carries out peptide synthesis services for research laboratories both within and outside Yale. The successful applicant for this research-track career position will oversee and provide synthetic peptide services, interact with Investigators in the recently funded Yale/NHLBI Proteomics Center, and will be given opportunities to carry out independent and collaborative peptide synthesis research. The Laboratory contains two Rainin Symphony instruments and a wide range of mass spectrometers (including Micro-mass Q-Tofs, MALDI SE and a soon-to-be-installed M@LDI L/R) are available for quality control analysis of synthetic peptides. Interested candidates should forward their curriculum vitae and the names of three references by December 20, 2002, to e-mail: janet.crawford@yale.edu. Yale University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF WASHINGTON Seattle

The focus of the new STC is the development of optoelectronic materials and devices for telecommunications, computing, and other sensing and signal processing applications. The Center, composed of six partner universities and additional participating universities, covers the entire spectrum of activities from fundamental theory to synthesis of materials to design and development of devices. For more information on this Center and these positions, please visit the website: https://depts.washington.edu/stcmditr/ index.html.

MANAGING DIRECTOR: The Managing Director will support the administrative and research activities of the STC. Responsibilities: centerwide coordination of activities and financial management, budget preparation, facilities support, proposal preparation, grant administration, human resources, general administration, and resource allocation.

DIRECTOR FOR EDUCATION AND OUT-**REACH:** The Education and Outreach Director will support the educational and outreach activities of the STC. Responsibilities: centerwide coordination of educational and outreach activities as well as some activities outlined under the Managing Director position. The ideal candidate for both positions will have proven leadership, administrative, communication, and team-buiding skills. Will have demonstrated competence in budget management, large event planning, coordination and the facilitation of substantial research projects, and especially coordinating projects involving many individual and institutional participants. A Ph.D. in a relevant scientific field is preferred, although a Master's-level degree or higher in business administration, law, public administration (education for the education and outreach position), or a scientific field will also be seriously evaluated. Five years of experience (one year for the education and outreach position) with a research institute or academic institution working within a scientific research setting and dealing with research-related administrative matters will be given priority. These positions will remain open until filled. However, the Search Committee will begin reviewing applications by December 15, 2002, and may make offers at any time thereafter. Further information may also be requested by sending an e-mail: stcsearch@chem.washington.edu. Applications or written inquiries should be submitted to: Chair, STC Search Committee, Department of Chemistry, Box 351700, University of Washington, Seattle, WA 98195-1700. Applicant must specify which position is being applied for. Salary commensurate with experience and comparable positions at the University of Washington. Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK FACULTY POSITION Basic Biomedical Sciences University of South Dakota School of Medicine

The Division of Basic Biomedical Sciences at The University of South Dakota School of Medicine invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Preference will be given to candidates with research interests related to the pathogenesis of gram-positive bacteria or virology including phage genetics. The successful candi-date will be expected to establish an independent research program and contribute to teaching graduate and medical students. Applicants should have a Ph.D. and at least two years of postdoctoral training. Salary will be commensurate with qualifications. Position includes competitive start-up funds. Applicants should send curriculum vitae; brief summary of research interests; and the names, e-mail addresses, and mailing addresses of three references to: Carleen Mc-Neely, Molecular Microbiology Search Commit-tee, USD School of Medicine, 414 East Clark Street, Vermillion, SD 57069-2390. Review of applications will begin December 6, 2002, and continue until position is filled. Information about the Division can be found at website: http://www.usd.edu/ biomed/. Affirmative Action/Equal Opportunity Employer.

MAYO CLINIC

Section of Scientific Publications **Manuscript Editor Position Rochester, Minnesota**

The Mayo Foundation and Mayo Clinic Section of Scientific Publications seek a full-time manuscript editor at Rochester, MN. Candidates should have substantial experience in editing peer-reviewed manuscripts, book chapters, books, and NIH grants. A relevant Ph.D. or M.D. degree is desirable but not essential. The current staff includes 7 biomedical editors and 23 editorial assistants and proofreaders. Candidates will be expected to furnish examples of their work so that the edited manuscript can be compared with the unedited copy. Successful applicants will be considered for a faculty appointment at Mayo Medical School (rank commensurate with experience). Mayo Clinic Rochester offers competitive compensation and comprehensive benefits including a relocation package. Our education and research emphasis also provides excellent opportunities for academic advancement. Apply by January 15, 2003.

Send CV to:

Joseph G. Murphy, M.D., FRCPI **Chair, Section of Scientific Publications Mayo Foundation and Mayo Clinic Plummer Building, S-10** 200 First Street SW, Rochester, MN 55905 Fax: 507-284-2107

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

FELLOWSHIPS



Department of Health and Human Services National Institutes of Health Warren Grant Magnuson Clinical Center **Research Fellowships in Molecular Imaging for** Molecular Biologists, Chemists and Ultrasound Physicists

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes.

The Molecular Imaging Laboratory in the Imaging Sciences Program of the Warren Grant Magnuson Clinical Center, a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, is recruiting for Research Fellows to participate in our research program.

The successful individual will possess an M.D. or Ph.D. degree in Molecular Biology, Chemistry, or Ultrasound Physics, have research experience in tissue analysis, genomics, proteomics, contrast agent development or high intensity focused ultrasound. The initial appointments will be two years in duration but extensions are possible.

Salary is commensurate with research experience and accomplishments, and full Civil Service package of benefits (including retirement, health, life and long term care insurance, Thrift Savings Plan participation, etc.) is available.

For additional information on this position, and for instructions on submitting your application, please contact Dr. King Li at kingli@nih.gov.



HHS and NIH are Equal Opportunity Employers

CHAIR OF MICROBIOLOGY

The University of Health Sciences-College of Osteopathic Medicine invites applications for the position of Microbiology Department Chair. The successful candidate will direct operations & administration of the microbiology department, and be qualified for the rank of Associate Professor or higher. Solid management/supervision skills are essential. Must have a doctoral degree in microbiology or related area, and be authorized to work in the U.S. Prefer teaching experience in pathogenic microbiology, mycology and parasitology at the medical school level. Must demonstrate record of ongoing research & be willing to collaborate in University education and research efforts; prefer individual committed to the University's expectation of extramurally funded research. Interested candidates must also have a strong commitment to advising medical students & University service

Salary will be commensurate with experience and qualifications. UHS offers an outstanding benefits package including an exceptional retirement plan. UHS is an active participant of the Kansas City Area Life Science's Initiative and is a collaborative research partner with local research enti-ties including the University of Missouri – Kansas City and the University of Kansas School of Medicine. UHS is in a beautiful, traditional setting near downtown Kansas City, MO. Please send a letter of interest, curriculum vitae, a statement of teaching philosophy and research interests, and contact information for three references to: Susan M. Schmidt, Assistant Director of Human Resources, University of Health Sciences, 1750 Independence Ave., Kansas City, MO 64106-1453; or E-mail: employment@uhs.edu (MS Word); or fax: 816-283-2285. www.uhs.edu Review of applications will continue until

the position is filled. Specific questions may be directed to Douglas R. Rushing, Ph.D., Search Committee Chair, 1-800-234-4847, ext. 2205; or 816-283-2205. Please visit www.kclifesciences.org for additional information on metropolitan initiatives.



the University of Health Sciences

The University of Texas at Austin is seeking highly qualified tenure track faculty at both the junior and senior level to be appointed in the Department of Biomedical Engineering.

The vision of the new BME Department is to integrate molecular and cellular biology with biomedical engineering. Outstanding candidates will be considered from the areas of cellular and bio-molecular engineering, cell and molecular imaging, and computational biomedical engineering and bioinformatics. Areas of expertise desired include: molecular engineering of novel diagnostic molecules, genetic and developmental guided tissue engineering, nanoprobes and nanostructures, bio-molecular and biomedical optics, computational cell biology, and database development and analysis applied to efficacy of therapies. Required qualifications include a doctorate in engineering or a related field.

Applicants must have an outstanding record of research accomplishments, a strong interest in undergraduate and graduate teaching in biomedical engineering and a commitment to professional service. In addition to establishing an aggressive program of research, the successful candidate will be expected to develop innovative research and teaching collaborations with the UT System Medical Schools as well as with centers of research excellence at UT Austin, including Institute for Cellular and Molecular Biology, The Center for Nano and Molecular Science and Technology, The Texas Materials Institute, The Texas Institute for Computational and Applied Mathematics and The Microelectronics Research Center.

Interested persons should submit a detailed curriculum vitae including academic and professional experience, a list of peer reviewed publications and other technical papers, a summary of research and teaching goals, and the names, addresses and telephone numbers of three or more references by December 31, 2002.

> **Biomedical Engineering Faculty Search Committee** The University of Texas Austin, TX, 78712-1084 http://www.bme.utexas.edu

EOE

The University of Georgia

ASSISTANT PROFESSOR NMR, Structural Biology The University of Georgia

The University of Georgia invites applications for a tenure-track faculty position shared by the Department of Chemistry and the Department of Biochemistry and Molecular Biology. Qualifications include a Ph.D. in chemistry, biochemistry, or related discipline; potential for excellence in teaching; and a demonstrated ability to conduct highly creative research. Preference will be given to outstanding candidates with an interest in applying NMR methods to prob-lems in structural biology. The University of Georgia has made substantial investments in infrastructure to support structural biology and can provide a stimulating environment for development of new programs in this area. This position is anticipated to be at the level of Assistant Professor beginning July 2003 and subject to availability of funds. Candidates should submit a résumé, a statement of research interests (five pages or less), a statement of teaching philosophy and experience (one page), and the names of at least three references to:

Chair, Search SB-04 Department of Chemistry 412 Chemistry Building University of Georgia Athens, GA 30602-2556

Applications received by December 15, 2002, are assured of consideration. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

The Terre Haute Center for Medical Education at the Indiana University School of Medicine invites applicants for a tenure-track position in pharmacology and toxicology starting July 1, 2003. A Doctoral degree in pharmacology or closely related discipline and promise of excellence in teaching are required. The successful candidate will have completed productive postdoctoral training, show outstanding promise for establishing an innovative research program, and be capable of establishing an extramurally funded laboratory. Opportunities exist for establishing synergistic ties to one or more research groups at the Center or within Indiana University. The successful candidate will also teach a one-semester medical-level course in pharmacology. Start-up funds and salary will be commensurate with the level of experience. Review of applications will begin November 1, 2002. Please send curriculum vitae, statement of research plan and teaching philosophy, and three letters of reference to:

Dr. Michael W. King Chair, Pharmacology Search Committee Terre Haute Center for Medical Education Indiana University School of Medicine Holmstedt Hall, Room 135 Terre Haute, IN 47809

Indiana University is an Affirmative Action/Equal Opportunity Employer; Minorities/Females/Disabled.

JUNIOR FACULTY POSITIONS Institute of Molecular Medicine and Genetics Medical College of Georgia

Two junior faculty positions at the rank of **IN-STRUCTOR** to **ASSISTANT PROFESSOR** are available in the following areas: (1) expertise in neural stem cell research. Will be expected to develop a plan for establishing a placenta/umbilical cord blood stem cell bank (ACH Number 43228) and (2) expertise in an area related to thymic development of T cells (ACH Number 43226).

Both positions will be expected to develop independent, extramurally funded research programs. Interested applicants should forward curriculum vitae and a list of three references to: Ann Gambill, MCG, IMMAG, CB-2803, Augusta, GA 30912. Equal Employment Opportunity/Affirmative Action/Equal Access Employer. P.O. Number E-00016093.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Division of Neurosciences Beckman Research Institute of the City of Hope

The Division of Neurosciences, Beckman Research Institute of the City of Hope, invites applications for a faculty position at the Assistant or Associate Professor level. As part of our continuing expansion, we seek candidates with research interests in the area of vertebrate neural development, broadly defined to encompass study of fundamental questions of phenotypic commitment and plasticity, differentiation, and synaptogenesis. Investigations involving stem cells and neural progenitors are of particular interest. This new position will complement the existing divisional focus on developmental neurobiology. The person appointed will have the opportunity to participate in the Graduate School of Biological Sciences. Compensation (institutionally funded) and start-up funds will be highly competitive.

The Beckman Research Institute provides an environment that encourages interdisciplinary collaborative interactions with institutional programs in molecular biology and gene regulation, immunology, diabetes and endocrinology, and hematology and bone marrow transplantation. In addition, the Institute offers an unusually rich set of core resources in transgenic mouse production, microarray-based analyses, oligonucleotide and peptide synthesis, DNA and peptide sequencing, and mass spectrometry/NMR. Further information on the Beckman Research Institute and the Division of Neurosciences is available at website: http:// default.asp.

Candidates should have a Ph.D. or M.D. degree, postdoctoral experience, and the potential to establish or to have established an independent research program. Applicants should submit curriculum vitae; a statement of research interests and plans; and the names, addresses, and telephone numbers of at least three references to: Michael E. Barish, Ph.D., Professor and Chair, Division of Neurosciences, Beckman Research Institute of the City of Hope, 1450 East Duarte Road, Duarte, CA 91010-3011. We will begin evaluating applications during November 2002 and will consider them until the middle of January 2003.

The City of Hope is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

FACULTY POSITION

The Department of Medical Microbiology and Immunology, College of Medicine, University of South Florida, invites applications for a tenure-track ASSIST-ANT or ASSOCIATE PROFESSOR position. Anticipated start June 2003. Successful candidate will be expected to actively participate in the development and teaching of courses for M.D., Ph.D., and M.S. students and to establish an externally funded research program. Requires Ph.D. or M.D. degree and notable publication record. Prefer research expertise in the areas of molecular microbiology and molecular immunology of human pathogens. Rank of Assistant Professor requires three years of postdoctoral experience. Associate Professor requires five years of experience at the Assistant Professor level, evidence of external funding of research, recognition by peers, and excellence in teaching. Negotiable terms include college-provided salary support, incentive salary bonuses, start-up research funds, and office and laboratory space. Send comprehensive curriculum vitae, statement of teaching and research goals, representative research publications, and names and addresses of three references to: Ms. Sally Baker, Departmental Search Committee, MDC Box 10, 12901 Bruce Downs Boulevard, Tampa, FL 33612. Applications must be received by February 3, 2003. For more information about the Department. see website: http://hsc.usf.edu/ MEDMICRO/microl.html. The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. For disability accommodations, contact Sally Baker; Telephone: 813-974-3281; TDD: 813-974-2218 at least five working days in advance. According to Florida law, applications and meetings regarding them are open to the public.

POSITIONS OPEN

Washington University in Sciouis SCHOOL OF MEDICINE FACULTY POSITIONS Cell Biology and Physiology

The Department of Cell Biology and Physiology at Washington University School of Medicine invites applications for tenure-track positions at the rank of **ASSISTANT PROFESSOR**. Outstanding individuals investigating fundamental problems in cell biology are encouraged to apply. Candidates must demonstrate the ability to develop an independent research program and a commitment to excellence in graduate education.

Applicants must have a Ph.D. and/or M.D. and postdoctoral experience. Please send curriculum vitae, a summary of current and proposed research programs, and arrange for three letters of recommendation to be sent to:

Cell Biology and Physiology Search Committee Attention: Dr. Maurine Linder Washington University School of Medicine

660 South Euclid Avenue, Campus Box 8228 St. Louis, MO 63110 E-mail: linder@cellbiology.wustl.edu

Applications should be received by January 15, 2003.

Washington University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

FACULTY Planetary Science Faculty

The Department of Earth, Atmospheric, and Planetary Sciences at Massachusetts Institute of Technology (MIT) invites applications for a faculty position in the area of planetary science. Rank and salary are open but we particularly encourage potential junior faculty to apply. We seek creative applicants with broad research interests who have a strong understanding of fundamental physical processes. The position is open to outstanding candidates in all areas of planetary science; the areas of solar system formation and planetary evolution are of particular interest. The applicant may have any focus: theoretical, experimental, or observational. Applicants capable of initiating and/or taking full advantage of future spacecraft opportuni-ties are encouraged to apply. MIT facilities include the Center for Space Research and a share of the two 6.5 meter telescopes of the Magellan Consortium. Interest in teaching at the graduate and undergraduate level is essential at MIT.

Interested individuals should send curriculum vitae and names of three references to: Ron Prinn, Department Head, Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology, 54-918, 77 Massachusetts Avenue, Cambridge, MA 02139-4307. E-mail: rgp@mit.edu; FAX: 617-253-8298. MIT is an Equal Opportunity/Affirmative Action Employer. MIT is a nonsmoking environment.

Tenure-track ASSISTANT or ASSOCIATE PROFESSOR in developmental neuroscience, Department of Neurobiology and Anatomy, University of Utah School of Medicine. Applicants must have a Ph.D., M.D., or equivalent degree and postdoctoral research experience. The ability to develop a very strong, independent research program in nervous system development is of paramount importance. A strong commitment to teaching medical and graduate students is also required. Send curriculum vitae, a statement of research interests, and names and addresses of three references to: T. N. Parks, Chair, Department of Neurobiology and Anatomy, University of Utah School of Medicine, 20 North 1900 East, Salt Lake City, UT 84132-3401 or to e-mail: najobapp@neuro.utah.edu. Deadline is March 1, 2003, or until a suitable candidate is found Visit our department website: http://www.neuro. utah.edu. Equal Opportunity Employer/Affirmative Action. We strongly encourage applications from women and minorities.

Assistant Professor Department of Anatomy and Neurobiology Dalhousie University Halifax, Nova Scotia Canada

The Department of Anatomy and Neurobiology at Dalhousie University is seeking applications for a probationary tenure-track position at the rank of Assistant Professor. Candidates must hold a PhD, and/or MD degree and have at least two years of post-doctoral training. The candidate will be expected to have a strong research background and to undertake an independent research programme. Current research activities within the Department include neurobiology, functional morphology, developmental biology, and molecular and cell biology. Candidates are expected to contribute to teaching in one or more of gross anatomy, histology, embryology, and neurobiology. Further information concerning the Department may be obtained by consulting its Web site at http://www.anatomy.dal.ca.

The successful applicant will be expected to compete for external research and salary support during the initial appointment and to participate in the undergraduate and graduate teaching programmes of the Department.

Applicants should submit a curriculum vitae, copies of three recent publications, a one to two-page statement outlining their research plans, a statement outlining their teaching experience and capabilities, and the names of three references to:

Dr. John Rutherford, Professor and Acting Head Department of Anatomy and Neurobiology, Faculty of Medicine Sir Charles Tupper Medical Building Dalhousie University 5850 College Street Halifax, Nova Scotia B3H 1X5 CANADA

Closing date for receipt of applications will be December 31, 2002, or until the position is filled. All qualified applicants are encouraged to apply; however, Canadians and permanent residents will be given priority. Dalhousie University is an Employment Equity/Affirmative Action employer. The University encourages applications from qualified Aboriginal people, persons with a disability, racially visible persons, and women.

aculty Positions in Bioinformatics of Biological Systems at the Wistar Institute

The Wistar Institute, an independent, non-profit research institute with a primary focus on cancer research, is seeking candidates for the rank of Assistant or Associate Professor to develop a vigorous, independent, extramurally funded research program using bioinformatic approaches to study complex biological systems. Research programs using com-putational approaches alone or in combination with experi-mental analyses are of interest and include, but are not limited to: biological network modeling, computational functional genomics, integration of complex biological datasets (proteomic, genomic, etc.), and genetic epidemiology.

The Wistar Institute currently includes 27 research laboratories in three programs (Molecular and Cellular Oncogenesis; Gene Expression and Regulation; and Immunology), and has superb core facilities, including state-of-the-art proteomics and genomics facilities (www.wistar.upenn.edu). The Institute provides a highly interactive environment with collaborative opportunities with other laboratories that are taking systems biology approaches to basic biological processes, cancer, and other human diseases. The Institute's location on the University of Pennsylvania campus provides convenient access to additional academic resources, including potential academic and clinical collaborators, and opportunities for training graduate students.

Highly competitive laboratory start-up support, salary, and fringe benefits will be offered. Candidates should have a Ph.D. or equivalent and advanced training in a relevant area. Applicants should submit curriculum vitae, brief summary of past and future research interests, and the names of three references to: David W. Speicher, Ph.D., Search ommittee Chair, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. E-mail: speicher@ wistar.upenn.edu. EOE/AA/M/F/D/V.

THE WISTAR INSTITUTE

Department of Health and Human Services National Institutes of Health

National Institute of General Medical Sciences

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes.

The National Institute of General Medical Sciences, a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, is recruiting for a Health Scientist Administrator (Biological Sciences) to manage the programming and evaluation of a portfolio of institutional research training grants to increase the number of ethnic minority students and faculty in the biomedical sciences. The individual selected for this position will provide scientific expertise in specialized areas of biology and/or chemistry, advise grantees and professional staff members regarding research aspects of grants within these areas of expertise, and serve as a source of technical knowledge. The position also requires making recommendations on the funding of specific research applications; attending meetings of study sections, review committees, and Council; and participating in site visits. The successful individual will possess a Ph.D. in an academic field of the health or pertinent sciences allied to health or health related research, have (1) worked independently in planning, organizing, and conducting biomedical, behavioral health or health-related research; (2) served effectively in research program administration in these fields; and (3) acquired an understanding of the history, interests, internal dynamics and relationships of organizations where health research is conducted. This experience may be gained as a principal investigator of a grant or contract, or may otherwise be gained through active involvement in initiating research projects, developing protocols, conducting studies, documenting findings, publishing results in peer reviewed journals, supervising staff, and managing budgets. Salary is commensurate with research experience and accomplishments, and a full Civil Service package of benefits (including retirement, health, life and long term care insurance, Thrift Savings Plan participation, etc.) is available. For additional information on this position, and for instructions on submitting your application, please see our website, at: www.nigms.nih.gov. DHHS/NIH is an Equal Opportunity Employer.



Telomerase Chance of a Life Time

Protein Chemist – Transcription Factor Purification

Join a small team of scientists focused on discovering ways to control the length of telomeres in human cells to alleviate the effects of aging and agerelated diseases. This team seeks a **protein chemist** to purify and identify transcription factors that regulate the expression of the telomerase gene. Expertise in all aspects of column chromatography, gel electrophoresis, protein quantitation, western blot analysis, association and dissociation kinetics, etc., is preferred. A recent Ph.D. or equivalent required.

Sierra Sciences, Inc. (SSI) is an early stage biotechnology company. Nestled in the foothills of the Sierra Nevada mountain range, the Reno/Lake Tahoe area offers great year-round recreational and cultural opportunities, along with very competitive housing and schools. We seek scientists with excellent credentials in all areas of biotech research.

Further information about Sierra Sciences and our research may be viewed on our website listed below.

Applicants should be interested in working in a very collaborative environment that encourages creative thinking. We offer excellent salaries and benefits, competitive with the San Francisco Bay Area. This is truly a "chance of a lifetime".

Interested applicants are invited to e-mail/Fax/send their resumes to:

Sierra Sciences, Inc. Human Resources 250 So. Rock Blvd., Suite 130 Reno, NV 89502 Fax: 775-856-9510 E-mail: hr@sierrasci.com Website: www.sierrasci.com



FACULTY POSITION STRUCTURAL BIOLOGIST/ PROTEIN CHEMIST

The Department of Molecular Genetics, Biochemistry, and Microbiology at the University of Cincinnati College of Medicine is searching for a Protein Chemical/Structural Biologist who utilizes X-ray crystallography. The appointment will be at either the ASSISTANT or ASSOCIATE level in the tenure track. We have a very strong NMR component of our structural biology program, which includes several state-of-the-art spectrometers (400, 500, 600 (×2), 800 MHz). The Department consists of 27 faculty members encompassing such areas as gene regulation and development, signal transduction, ion transport, immunology, pathogenic mechanisms, cancer biology, and structural biology. The Department provides an exceptional environment for interacting with colleagues, and the Department and college maintain a number of core facilities unparalleled in most institu-tions. These include a BL3 containment facility for work with pathogens, transgenic and knockout mouse cores, DNA synthesis and sequencing facilities, gene microarray analysis, proteomics, and bioinformatics. The Department maintains an active graduate program with 50 Ph.D. students.

Our program can be visited through our website: http://www.molgen.uc.edu. Curricula vitae, a brief description of research program, and the names of three qualified references should be sent to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry, and Microbiology, University of Cincinnati College of Medicine, 231 Albert Sabin Way, Cincinnati, OH 45267-0524.

UNIVERSITY OF TORONTO Department of Botany

The Botany Department of the University of Toronto invites applications for a tenure-track position in plant-microbe interactions at the ASSISTANT PROFESSOR level starting July 1, 2003. The successful candidate should have a Ph.D. and, preferably, postdoctoral experience. Applicants must have an outstanding record in research and teaching. Research areas of particular interest include plant-microbe interactions at the molecular, cellular, genetic, biochemical, or physiological levels. Teaching responsibilities will include participation in team-taught undergraduate and graduate courses in appropriate areas of biology such as plant-microbe interactions, plant pathology, and cell or molecular biology. Applicants should submit curriculum vitae; a statement of re-search and teaching interests; and arrange for three letters of reference to be sent to: Professor J.R. Coleman, Chair, Department of Botany, Univer-Sity of Toronto, 25 Willcocks Street, Toronto, Ontario M5S 3B2 Canada by January 6, 2003.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

The Department of Chemistry at the University of Virginia invites applications for tenure-track appointments at the ASSISTANT PROFESSOR level. We are seeking individuals whose research interests and expertise are in the areas of spectroscopy or bioanalytical chemistry. The successful candidates will be expected to establish an externally funded research program that will attract top-caliber graduate students and Postdoctoral collaborators. Teaching ability at both graduate and undergraduate levels is also a prime consideration. On-campus interviews will be-gin in December 2002. Applicants should send curriculum vitae, three letters of recommendation, and a detailed description of research plans to: Professor Timothy Macdonald, Department of Chemistry, University of Virginia, P.O. Box 400319, Char-lottesville, VA 22904-4319. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR Neurobiologist

The Department of Biology at the College of New Jersey is currently seeking applicants for a tenure-track position in neurobiology. The successful candidate should be trained and conducting research in some aspect of cellular or molecular-based neurobiology and should have a strong commitment to the education of undergraduates through teaching and research. Teaching responsibilities will involve the development of an upper-level course in neurobiology as well as participation in our introductory course sequence including cell and molecular biology. Development of a research program involving highly motivated undergraduates is expected. Start-up funds are available. A Ph.D. is required and postdoctoral experience preferred.

The College of New Jersey is a highly selective, comprehensive institution with 5,800 undergraduate students. Located on a 289-acre, tree-lined campus, our location in the greater Princeton, New Jersey, area offers opportunities to interface with pharmaceutical/biotechnological companies and other academic institutions. The Biology Department is part of the School of Science and especially values candidates who will work collaboratively with other departments within the School or the College. The Department is housed in a newly constructed building with excellent facilities for research and teaching.

A review of applications will begin January 6, 2003. To apply, please send curriculum vitae; transcripts; statement of teaching and research interest; representative publications; and three letters of recommendation to: Dr. James Bricker, Chair, Search Committee, Department of Biology, The College of New Jersey, P.O. Box 7718, Ewing, NJ 08628-0718. Telephone: 609-771-2457; FAX: 609-637-5118. For further information about The College, please visit our website: http://www.tcnj.edu. To enrich education through diversity, The College of New Jersey is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION in functional genomics. The Department of Biology at the University of Kentucky invites applications for a tenure-track ASSIST-ANT PROFESSORSHIP in the area of functional genomics. This position is part of an ongoing, NSFfunded, Universitywide initiative. All applicants applying genomic approaches to contemporary biological problems will be considered, although candidates with research programs in development with an emphasis on neuroscience are of special interest. Competitive salaries, generous equipment/supply budgets, new laboratory and computational facilities, and an outstanding collegial environment are available. The successful applicant is expected to establish a nationally competitive research program and participate in undergraduate and graduate instruction. Applicants should submit curriculum vitae, a statement of research interests, and arrange for three letters of recommendation to be sent to: Dr. Elizabeth A. Debski, Chair, Functional Genomics Search Committee, Department of Biology, University of Kentucky, Lexington, KY 40506-0225. FAX: 859-257-1717; Website: http://biology.uky.edu. Application review will begin on December 20, 2002, and continue until the position is filled. The University of Kentucky is an Equal Opportunity Employer.

Immediate availability of two **POSTDOCTORAL RESEARCH POSITIONS** to study dynamic aspects of normal and aberrant signal transduction in human breast and lung cancer. Background in molecular/cellular biology required; experience in signal transduction strongly preferred. Send cover letter indicating research interests and experience, curriculum vitae, and three letters of reference to:

Stanley E. Shackney, M.D. Director, Laboratory of Cancer Cell Biology and Genetics Allegheny Singer Research Institute 320 East North Avenue Pittsburgh, PA 15212 FAX: 412-359-3238 E-mail: shackney@wpahs.org

POSITIONS OPEN

PHYSIOLOGIST The Department of Biology

Seton Hall University, the oldest and one of the largest Diocesan universities in the nation, invites applications for a tenure-track position at the **ASSIST**-**ANT PROFESSOR** level to begin in the fall of 2003.

Responsibilities will include the coordination of undergraduate- and graduate-level courses. The teaching load is expected to be four/four with a regular release of one three-credit course each semester for research. The successful candidate will be expected to establish and maintain an active, independent research program. This position is pending final budget approval.

Applicants must have a Ph.D. in physiology/ pharmacology or equivalent field. Postdoctoral experience is required and research in neurophysiology, cell physiology, and neuropharmacology (using molecular biological techniques) is preferred. Applicants must possess an understanding of and willingness to support the Seton Hall University Catholic Mission.

Interested candidates should send curriculum vitae; teaching experience; description of research interests; and three references on or before November 22, 2002, to:

Seton Hall University Dr. Sulie L. Chang Professor and Chair, Department of Biology Attention: Faculty Positions Job Code: F-02102298 400 South Orange Avenue South Orange, NJ 07079 E-mail: changsul@shu.edu Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS Parasitology and Lower Plant Functional Genomics

The Department of Biology at the University of Saskatchewan invites applications for two tenuretrack positions in the areas of parasitology and lower plant functional genomics with teaching responsibilitics in the areas of invertebrates and lower plants (including algae) respectively. Candidates should have a minimum of a Ph.D. degree and preferably teaching and postdoctoral experience. Applications due January 15, 2003, to take effect on July 1, 2003. Send curriculum vitae and the names, addresses, telephone/FAX numbers, and e-mail addresses of at least three references to: Dr. V.K. Sawhney, Head, Department of Biology, 112 Science Place, University of Saskatchewan, Saskatoon, SK S7N 5E2 Canada. For details on these positions and the Department, see website: http://www.usask.ca/biology.

The University of Saskatchewan is committed to Employment Equity. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

The Massachusetts General Hospital (MGH) Division of Hematology/Oncology and Cancer Center invite applications for the position of DIRECTOR OF LEUKEMIA RESEARCH. Board-certified Hematologists/Oncologists acting as Principal Inves-tigators at the ASSOCIATE PROFESSOR level are encouraged to apply. A record of program development and success in basic research with translational links to patient care is required. Emphasis is placed on the ability to foster interaction between laboratory and clinical Investigators and to build cooperative teams. This position includes joint research activities with the Dana-Farber Cancer Institute and Brigham and Women's Hospital. Please submit a letter describing qualifications, with curriculum vitae and names of three references to: Dr. Bruce Chabner, Chief of Hematology/Oncology, Massachusetts General Hospital, 100 Blossom Street, Cox 640, Boston, MA 02114-2617. MGH is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are urged to apply.

NEUROSCIENCE University of California at Berkeley

The Department of Molecular and Cell Biology is seeking applications for a faculty position in Neuroscience at the level of either tenure-track Assistant Professor or tenured Associate or Full Professor. Research areas of particular interest include cellular, molecular, developmental, and system/computational neuroscience. The appointee is expected to join the faculty beginning July 1, 2003, or thereafter. Applicants should have demonstrated excellence, originality, and productivity in research, as well as an interest in undergraduate and graduate education.

Applications should include a curriculum vitae, bibliography, a brief description of research accomplishments, a two-page statement of research objectives and teaching interests, and reprints of the three most significant publications. Please arrange to have three letters of reference sent to:

Department of Molecular and Cell Biology Chair, Neurobiology Search University of California 401 Barker Hall #3202 Berkeley, CA 94720-3202

Applications must be received by **December** 9, 2002.

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

Scientific Staff

The Department of Applied Ocean Physics and Engineering at the Woods Hole Oceanographic Institution (WHOI) invites applications for several tenure track faculty positions in the areas of:

- Air/Sea Interaction
- Coastal Fluid Dynamics and Near Shore Processes
- Wave Propagation, Scattering, and Signal Processing
- Underwater Vehicle Dynamics

We seek exceptional candidates from the mathematical, physical, biological, and engineering sciences to complement our existing observational and theoretical strengths in these areas. Possible areas of specialization include: observational air/sea interaction; numerical modeling of the coastal ocean and estuaries; surf zone dynamics, sediment transport, and near shore morphology; underwater acoustic modeling, analysis, and inverse problems; underwater vehicle control, and imaging. Candidates are expected to develop their own independent, externally funded, and nationally/internationally recognized research/education programs. Faculty have the option of advising graduate students and teaching courses through the MIT/WHOI Joint Program in Oceanography and Oceanographic Engineering.

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For more detail visit our website at www.whoi.edu/services/HR/jobs. Send resume to: Woods Hole Oceanographic Institution, Human Resources Office, Box JET14, MS #15,

Woods Hole, MA 02543 Woods Hole Oceanographic Institution is an equal opportunity employer M/F/D/V. WHOI is a smoke free workplace.

Faculty Position in Ornithology at Yale University

In partnership with the Peabody Museum at Yale University, the Department of Ecology and Evolutionary Biology seeks a distinguished senior avian biologist with interests that include collections based research and teaching. The candidate will fill a tenured faculty position in the Department of Ecology and Evolutionary Biology and will be the curator of ornithology in the Peabody Museum. The successful candidate shall be recommended for appointment by the University to the Coe Professorship in Ornithology. We seek creative individuals with an internationally recognized research program in any area of avian biology that would be complementary to existing research programs at Yale. In his/her capacity as Curator, the individual selected would oversee the Peabody Museum's outstanding ornithological collections and specialized library, and would be responsible for their use, maintenance, growth and development. Closing date for applications is **January 15, 2003**.

Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

Ornithology Search Committee c/o Professor Günter P. Wagner Yale University Department of Ecology and Evolutionary Biology New Haven, CT 06520-8106

Yale University is an Equal Opportunity/Affirmative Action Employer, and applications from women and members of minority groups are especially encouraged.

Department of Health and Human Services National Institutes of Health Notional Cancer Institute NCER Metabolism Branch

The National Cancer Institute, Metabolism Branch, a major research component of the National Institutes of Health (NIH) and of the Department of Health and Human Services, is offering a 3-year post-doctoral research training fellowship position in the laboratory of Dr. Sigrid Dubois/Dr. Thomas Waldmann for an individual who would investigate cytokine signaling during activation of T and NK cells. Interests of the laboratory focus on the cellular and molecular analysis of cytokine-induced activation of T-cells and the understanding of the specific roles played by IL-15 and IL-2 during the immune response. Present interests focus on the recent observations in the laboratory that although IL-2 and IL-15 share two receptor subunits they have distinct functions in adaptive immunity. IL-2 by stimulating activation-induced cell death (AICD) is dedicated to the prevention of immune responses to self whereas IL-15 prolongs immune responses to foreign pathogens through its inhibition of AICD and its stimulation of memory CD8 T-cell survival. In addition, the laboratory has demonstrated that the receptor IL-15R alpha on antigen presenting cells recycles and presents IL-15 in trans to neighboring T-cells. The candidate would be involved in several areas of concentration which include the comparison of IL-15 and IL-2 signaling to define the pathways that underlie their distinct functions.

Interested candidates should have a strong background in molecular and cellular biology, and those without as well as with previous post-doctoral experience are encouraged to apply. To be eligible the candidate must be within 5 years of obtaining their doctoral degree. Candidates should submit their statement of interest, curriculum vitae, bibliography, and list of three references to: Ms. Jean Decker, Bldg. 10, Rm 4N115, NIH, Bethesda, Maryland 20892-1374. (e-mail: jrmdeck@helix.nih.gov.

HHS and NIH are Equal Opportunity Employers.



MICROBIAL ECOLOGY, GENOMICS, AND EVOLUTION Department of Ecology and Evolutionary Biology University of Arizona

The Department of Ecology and Evolutionary Biology seeks candidates for a tenure-track ASSIST-ANT PROFESSORSHIP. Applicants investigating the biology of bacteria, fungi, viruses, or unicellular eukaryotes with interests in any of the following areas are invited to apply: effects of microbes on large-scale ecological processes; ecological genomics; microbial communities and biodiversity; impacts or implications of global change; metabolic networks; bioinformatics; the history of life on Earth; pathogenic or symbiotic interactions; or other aspects of microbial ecology, genomics, or evolution. Research approaches could include any combination of experimental, molecular, field, and informatic methods. The successful candidate will be expected to teach at the undergraduate and graduate levels and to develop an externally funded research program. A Ph.D. in a related field is required.

To apply, please send curriculum vitae; statements of research and teaching; and arrange for three letters of recommendation to be submitted to: Dr. Nancy Moran, Chair of Microbial Search Committee, Department of Ecology and Evolutionary Biology, University of Arizona, P.O. Box 210088, Tucson, AZ 85721-0088. Review of applications will begin December 5, 2002, and will continue until the position is filled. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minotities/Women/Disabled/Vetrans.

Susquehanna University invites applications for two tenure-track ASSISTANT PROFESSOR positions to begin in August 2003, one in organic chemistry and the other in biochemistry. The successful candidates should demonstrate strong evidence for the potential to provide excellence in undergraduate education and academic advising. Teaching duties will include courses in the area of specialization and (in the case of the biochemistry position) general chemistry. An active research program involving undergraduate students will be expected. A Ph.D. is required; post-doctoral experience is preferred. Special consideration will be given to candidates that have additional expertise in toxicology. Applicants should send curriculum vitae, a statement of teaching philosophy, a brief description of research plans, copies of graduate transcripts, and arrange to have three letters of recommendation sent to: Dr. Chris Janzen, Chair, Department of Chemistry, Susquehanna University, Selinsgrove, PA 17870. Review of applications will begin on November 15, 2002, and continue until the positions are filled. Susquehanna University is an Equal Opportunity Employer; women and minorities are especially encouraged to apply.

PROGRAM MANAGER National Estuarine Research Reserve San Francisco Bay NERR

The Romberg Tiburon Center (RTC) for Environmental Studies, San Francisco State University, seeks candidates for the San Francisco Bay National Estuarine Research Reserve (SF Bay NERŔ) Program Manager to coordinate this new multicomponent reserve; administer federal and private grants and state contracts; represent the reserve in the broader Bay Area community; hire, evaluate, and supervise staff; and participate as a member of the RTC faculty group. Ph.D. degree (or equivalent) in science or public policy and fiscal experience with budgets, grants, contracts, and other administrative practices required. Send curriculum vitae and a statement of qualifica-tions and interests to: Chair, SF Bay NERR Search Committee, Romberg Tiburon Center, 3152 Par-adise Drive, Tiburon, CA 94920. Salary range: commensurate with experience up to \$90,000 per year (calendar-year appointment). Applications will be reviewed beginning December 1, 2002. For further information, see website: http://rtc.sfsu.edu.

POSITIONS OPEN

PLANT ECOLOGIST Rochester Institute of Technology (RIT)

We seek a Plant Ecologist with experience in plant community ecology, evolutionary ecology, population ecology, or related disciplines. Applicants must have a Ph.D., relevant postdoctoral experience, and a commitment to teaching excellence. The successful candidate will teach an upper-level ecology course, an advanced course in his/her area of expertise, and will participate in the interdisciplinary Environmental Science sequence. Research that engages both undergraduate and graduate students will be expected from the candidate. While it is anticipated that this position will be filled at the ASSISTANT PROFESSOR level, more senior candidates are encouraged to apply. Rank and salary will be commensurate with experience and record of accomplishments. The RIT Department of Biological Sciences is a growing and progressive department with 420 undergraduate students. We offer degree programs in biology, biotechnology, and environmental science and have new Master's programs in environmental science and bioinformatics coming online this year. See our website: http://www.biology.rit.edu

Submit statements of academic and research interests, teaching philosophy, curriculum vitae, and arrange to have three letters of recommendation sent to: Chair, Search Committee, Department of Biological Sciences, Rochester Institute of Technology, 85 Lomb Memorial Drive, Rochester, NY 14623-5603. The Department of Biological Sciences is strongly committed to diversity in our faculty, staff, and student populations. We welcome applications from candidates who are part of a minority or underrepresented group. RIT is an Equal Opportunit/Affimative Action Employer and especially encourages applications from persons able to contribute in a meaningful way to the Institute's commitment to diversity and pluralism.

VETERINARY PATHOLOGIST

The Division of Comparative Pathology, Tulane National Primate Research Center, Tulane University Health Sciences Center, invites applications for FAC ULTY POSITIONS in anatomic pathology. Academic rank and salary will be commensurate with the applicant's qualifications. Minimum qualifications in-clude a D.V.M. or equivalent degree and eligibility to take the American College of Veterinary Pathologists certifying examination. Preferred applicants will also have a Ph.D. and a strong interest in establishing an independent research program. Primary responsibilities include participating in the diagnostic service of the Division; pursuing independent research; and collaborating with other Investigators on the design, implementation, and interpretation of diverse biomedical research projects. The Division of Comparative Pathology has excellent infrastructure to support collaborative and independent research and has established interests in the pathogenesis of infectious diseases including AIDS, Lyme disease, ma laria, and tuberculosis.

To apply, send a letter indicating your research interests and experience; curriculum vitae; and the names of three individuals who may be contacted for references to: Dr. Ronald Veazey, Search Committee Chair, Tulane National Primate Research Center, 18703 Three Rivers Road, Covington, LA 70433.

Tulane University is an Affirmative Action/Equal Opportunity Educator and Employer. Women and individuals from underrepresented minorities are strongly encouraged to apply.

Charleston, South Carolina, consulting firm has opportunity for GEOPHYSICIST/GEOSCIEN-TIST to utilize computer-aided radar tomography (CART) in surveying underground infrastructure at various types of project sites. Minimum requirements for the position are the equivalent of a Bachelor of Science or higher with an academic concentration in geoscience or geophysics and at least two years of substantive experience in subsurface utility engineering, project management, and use of CART hardware and software. Contact: Rosemary Kiekow, Director of Human Resources, General Engineering Laboratories, P.O. Box 30712, Charleston, SC 29407.

POSITIONS OPEN

CHAIRPERSON, CHEMISTRY Western Michigan University

Western Michigan University invites applications for the position of Chair of the Department of Chemistry beginning fall 2003. WMU is a studentcentered, research university of 30,000 students that has a record of excellence in undergraduate education and is dedicated to promoting its graduate programs. We seek applications from dynamic and experienced professionals who will embrace the challenge of advancing our evolving B.S., M.S., and Ph.D. programs and who can lead a department of 18 faculty with diverse specializations in traditional chemical and modern interdisciplinary fields. The Chair will be expected to shape the future direction of the Department through the hiring of additional faculty; set the highest standards of pedagogical and scholarly activity; and promote collaborative, interdisciplinary research, particularly in the areas of environmental chemistry, biotechnology, and nanotechnology. Candidates who have demonstrated the ability to direct a well-funded, internationally competitive research program; demonstrated excellence in teaching; and possess sophisticated and creative administrative skills are strongly encouraged to apply. Applicants should currently have tenure and credentials commensurate with the rank of FULL PROFESSOR. Applicants should send a letter of application, curriculum vitae statement of research plans, a description of start-up requirements, and should arrange to have three or more letters of reference sent to: **Dr. Marc W. Perk**ovic, Department of Chemistry, Western Michi-gan University, Kalamazoo, MI 49008-3842. FAX: 269-387-2909; e-mail: perkovic@wmich. edu. For more information, visit our website: http://www.wmich.edu/chemistry. Review of applications will begin December 15, 2002, and continue until the position is filled. WMU is an Equal Opportunity Employer/Affirmative Action Employer.

Mary Baldwin College, a private liberal arts college for women, invites applications for two tenure-track positions in biology at the ASSISTANT PROFESSOR level. Applicants should be committed to teaching in a liberal arts college with an emphasis on student research projects, strong academic advising, involvement in campus life, and a demonstrated ability to work one-on-one with students. One position includes teaching genetics, comparative anatomy, physiology, and human anatomy and physiology. The second position includes teaching ecology, environmental issues, primate behavior, and ornithology. Ph.D. required. Send résumé, application letter, graduate transcripts, and three letters of recom-mendation to: Biology Search Committee, c/o Dean of the College, Mary Baldwin College, Staunton, VA 24401. Applications will be accepted until position is filled. For information about the Department, visit website: http://academic.mbc.edu/biology. Mary Baldwin is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are strongly encouraged

MICROBIOLOGY. The Department of Biology at the University of San Francisco invites applications for a tenure-track position (pending approval) at the ASSISTANT PROFESSOR level beginning August 2003 to teach upper-division courses in microbiology, participate in lower-division courses for majors and nonmajors, and establish a research program in the biology of microorganisms that applies molecular approaches. For details, please see website: http:// www.usfca.edu/hr. University of San Francisco is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR to teach human gross anatomy. Experience teaching gross anatomy preferred. Area of research open; present areas of research in department are cell biology, neurobiology, and evolutionary morphology. Must have strong commitment to teaching and development of a fundable research program. Salary competitive. Send curriculum vitae and names of three references to: Dr. Salvatore Rapisardi, Department of Anatomy, College of Medicine, Howard University, 520 W Street, N.W., Washington, DC 20059.

GLOBAL OPPORTUNITIES



National Tsing Hua University College of Life Science Hsinchu 300, Taiwan, ROC

The College of Life Science of the National Tsing Hua University (NTHU) in Hsinchu, Taiwan has faculty openings at all levels to begin August 1, 2003. We are seeking outstanding candidates in all fields of life sciences, with special emphasis on

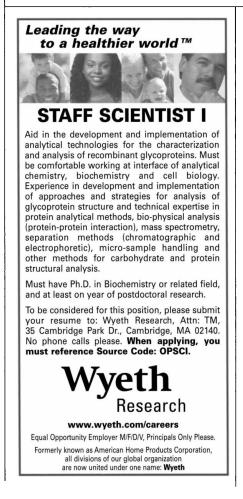
Structural Biology, Developmental Biology and Bioinformatics and Computational Genomics this year. Crossdisciplinary appointments with other colleges in the University are possible and encouraged. Excellence in research and teaching are the main qualifications for consideration to an appointment. Proficiency in Chinese or English is a requirement as NTHU intends to become a fully bilingual institution within ten years.

NTHU ranks academically among the top universities in Taiwan (#1 in several recent magazine surveys). Our core strengths lie in the mathematical and physical sciences, engineering, life sciences, humanities, social sciences, science and technology management, and general education. Currently, we have about 500 faculty members and about 8,500 students, roughly equally divided among undergraduate and graduate students. The University has ambitious expansion plans as our goal is to become one of the great institutions of research and higher education in the world.

In 2002 NTHU allied with National Central University (NCU), National Chiao Tung University (NCTU), and National Yang Ming University (NYMU) to form the University System of Taiwan (UST). The UST, headed by NTHU and NCTU, has been chosen by the Ministry of Education to spearhead the drive to excellence of the research and higher-education effort in central Taiwan. Under UST, two centers in Brain Research and Nano-Technology will be established. Particularly well-qualified candidates for the senior positions available through this advertisement will be considered for a leadership appointment at the system-wide level.

NTHU also has strong ties and collaborative agreements with the leading research and development institutes in Taiwan, in particular, Academia Sinica, the Industrial and Technology Research Institute, the National Health Research Institute, the National Center for High Performance Computing, and the National Synchrotron Radiation Center, all of which are within a short commute of the campus. NTHU's close proximity to the Hsinchu Science-based Industrial Park is a further attraction, as is the famed physical beauty of our main campus. A satellite campus is under discussion in I-lan County with a focus on agricultural and fisheries biotechnology.

The College of Life Science consists of four Institutes, namely the (I) Institute of Molecular Medicine, (II) Institute of Molecular and Cellular Biology, (III) Institute of Biotechnology, and (IV) Institute of Bioinformatics and Structural Biology. Applicants should submit their curriculum vitae plus a statement of their current research interests, future plans and the Institute of relevance to the candidate. Please arrange for three letters of references to be sent by 1 December 2002 to Dr. Yen-Chung Chang. Inquiries can be made by email at ycchang@life.nthu.edu.tw. More information is available at www.life.nthu.edu.tw. We hope to conduct interviews of the short list of candidates starting in mid-January 2003. NTHU is an Equal Opportunity Employer.



COURSE

Microbial Diversity

2003 Summer Course



June 15 -August 1, 2003

An intensive course for graduate or postdoctoral students and wellestablished investigators to become proficient in working with a broad range of microbes from various marine, fresh water, animal and plant habitats, and in approaches for recognizing the metabolic, phylogenetic, and genomic diversity of cultivated and uncultivated bacteria. The course emphasizes nature as the source of microorganisms for research.

Application deadline: Feb. 1, 2003

Financial assistance is available!

For more information contact: Carol Hamel, Admissions Coordinator (508) 289-7401; admissions@mbl.edu or visit <u>http://courses.mbl.edu</u>

MBL is an EEO/Affirmative Action Institute

Marine Biological Laboratory Woods Hole, Massachusetts

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FACULTY POSITION Yale University School of Medicine Department of Cellular and Molecular Physiology

Applicants are solicited for a tenure-track faculty position at the junior or senior level in the Department of Cellular and Molecular Physiology, Yale University School of Medicine. Candidates must hold a Ph.D., M.D., or equivalent degree. The candidate's research interest should be in the general area of molecular, cellular, or systems physiology.

Complete curriculum vitae; statement of research interests and goals; and three letters of reference should be sent by February 1, 2003:

Dr. Steven C. Hebert, Chair Department of Cellular and Molecular Physiology Yale University School of Medicine 333 Cedar Street P.O. Box 208026 New Haven, CT 06520-8026

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

TENURE-TRACK POSITION Bacteriology/Microbiology

Coe College, a selective four-year liberal arts college with six faculty members in its Biology Department, seeks a Bacteriologist/Microbiologist for a fulltime, tenure-track position at the ASSISTANT PROFESSOR level. Teaching responsibilities include microbiology, bacteriology, the cellular/molecular semester of general biology, and cell physiol-ogy (eukaryotic emphasis) or suitable alternative. The successful candidate must have a Ph.D.; demonstrate experience, interest, and ability in teaching undergraduates; and have research interests that can be adapted to include undergraduates. Please send curriculum vitae, statement of teaching interests, and three letters of recommendation to: Dr. Marc Roy, Dean of the Faculty, Coe College, Cedar Rapids, IA 52402. Deadline for applications is January 5, 2003. Coe College is an Affirmative Action/Equal Opportunity Employer and encourages applications from candidates who can increase the diversity of the College.

GENETICS/MOLECULAR BIOLOGY. California University of Pennsylvania welcomes applications for a TENURE-TRACK FACULTY POSI-TION beginning August 2003. Duties for this position include teaching of genetics, cell biology, and courses in support of the biotechnology program. Applicants must have a Ph.D. in genetics or molecular biology. Send letter of application; full curriculum vitae; transcripts; and the names, addresses, telephone numbers, and e-mail addresses of three professional references to: Dr. Marc A. Sylvester, Search Chair, Department of Biological and Environmental Sciences, California University of Pennsylvania, 250 University Avenue, California, PA 15419. For more information on this position, visit our website: http://www. cup.edu/employ/faculty. California University of Pennsylvania is an Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR (tenure track) to continue a program in shellfish pathology at Rutgers University's Haskin Shellfish Laboratory. The applicant will develop an active, grant-funded research program with a broad view of shellfish disease and its impacts at the organism, population, community, and ecosystem levels with emphasis on estuarine and nearshore environments. Ability to interact with shellfish industry, state and national regulatory personnel, and other Investigators at Rutgers University and at other coastal states is essential.

Please send curriculum vitae and the names of three references by December 15, 2002, to: Dr. Gary L. Taghon, Rutgers, The State University of New Jersey, Institute of Marine and Coastal Sciences, 71 Dudley Road, New Brunswick, NJ 08901-8521.

POSITIONS OPEN

CONSERVATION BIOLOGIST/LAND-SCAPE ECOLOGIST: West Virginia University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level in the Department of Biology effective August 16, 2003. We are seeking applications from individuals with a broad biology background to develop a strong, independent research program and be committed to excellent teaching at the undergraduate and graduate levels. Possible areas of research could include invasive species biology, conservation of endangered plants or animals, modeling, or landscape ecology. Individuals who might use GIS, stable isotope, or molecular approaches are also encouraged to apply. Preference will be given to applicants whose expertise complements that of existing faculty. West Virginia University is located in Morgantown, West Virginia, which was recently voted 'Best Small City in the East' by the Rating Guide to Life in America's Small Cities. The Department of Biology has also recently moved into the state-of-the-art Life Sciences Building with excellent laboratory and greenhouse facilities. Qualified applicants should submit statements of research qualifications and objectives and their teaching philosophy, curriculum vitae, representative publications, estimated start-up costs, and three letters of recommendation. Review of applications will commence January 5, 2003. Applications should be sent to: Dr. James B. McGraw, Search Committee Chair, Department of Biology, West Virginia University, Morgantown, WV 26506-6057. For more information, visit the departmental website: http:// www.as.wvu.edu/~biology; e-mail: jmcgraw@ wvu.edu; Telephone: 304-293-5201, Extension 31532. West Virginia University is an Equal Opportunity/ Affirmative Action Employer and does not discriminate on the basis of race, color, religion, sex, age, marital status, disability, veteran status, national origin, or sexual orientation.

FACULTY POSITION Department of Biochemistry and Molecular Biology Pennsylvania State College of Medicine

Applications are invited for a tenure-track position at the ASSISTANT, ASSOCIATE, or FULL PRO-FESSOR rank. We seek individuals that have a record of success in functional and/or structural analysis (including NMR or crystallography) of biologically important macromolecules. Expertise in areas of priority for the College (including proteomics, genomics, computational biology, cancer, diabetes, and cardiovascular disease) is desirable. Successful candidates must have a Ph.D. and/or M.D. and are expected to establish or to have established (depending on rank) independent, extramurally funded research programs and to participate in the education of medical and graduate students in the College and in the Life Sciences Consortium of Penn State. Applicants should send curriculum vitae, a one-to-two-page synopsis of research plans, and the names and addresses of three references to: Search Committee, Department of Biochemistry and Molecular Biology, Penn State College of Medicine, H171, Hershey, PA 17033-0850. Review begins in November 2002; applications accepted until the po-sition is filled. Website: http://www.hmc.psu. edu/biochemistry. Penn State is committed to Affirmative Action, Equal Opportunity, and the diversity of its workforce.

MOLECULAR EVOLUTION/ BIOINFORMATICS

Two **POSTDOCTORAL POSITIONS** are available to develop a software system to facilitate automated evolutionary analysis of sequence features and to apply this system to resolving the intron origins debate. Productive research experience in statistical or computer-based analysis of biological data is absolutely required. Send curriculum vitae, a one-page statement of interest, and contact information for three references to: Dr. Arlin Stoltzfus, Position Number R3-0280/81, Center for Advanced Research in Biotechnology, 9600 Gudelsky Drive, Rockville, MD 20850. E-mail: arlin@carb.nist.gov. Review of applications begins December 1, 2002, and continues until positions are filled. Equal Employment Opportunity/Affirmative Action.

POSITIONS OPEN

ENDOWED CHAIR Evelyn F. McKnight Chair for Brain Research in Memory Loss Evelyn F. and William L. McKnight Brain Institute of the University of Florida

The University of Florida announces the creation of an Endowed Chair for a Scientist working on mechanisms of age-related changes in memory. Potential areas of research may include studies ranging from molecular to systems approaches. Applicants must have a Ph.D. and/or M.D. degree and evidence of a nationally recognized research program. Laboratory and office space will be provided in the new state-ofthe-art Evelyn F. and William L. McKnight Brain Institute Building (website: http://www.mbi.ufl. edu.) Salary and academic rank of ASSOCIATE PROFESSOR or above for this tenure-track position will be commensurate with experience.

Send curriculum vitae, a statement of research goals, and the names of three references to:

Dr. John M. Petitto Chair of the Search Committee McKnight Brain Institute 100 Newell Drive, Box 100015 University of Florida Gainesville, FL 32610-0015 Telephone: 352-294-0416; FAX: 352-294-0425 E-mail: jpetitto@psych.med.ufl.edu

Applications should be received by February 1, 2003. The anticipated earliest start date is July 1, 2003. The University of Florida is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

TWO FACULTY POSITIONS The Large Lakes Observatory University of Minnesota Duluth

The University of Minnesota will fill two tenuretrack faculty positions in the Large Lakes Observatory (LLO) on the Duluth campus (website: http:// www.d.umn.edu/llo). LLO is approaching its second decade of operation. LLO's outlook and activities are global with current research on lakes in East Africa, Asia, the United States, and Canada. We invite applications for the following two positions: (1) DI-RECTOR. Candidates must have a Ph.D. in limnolgy, oceanography, or a related discipline; must have experience in leading an internationally recognized research program in any aspect of oceanographic or large lakes research; and must have a demonstrated commitment to further basic research on large lakes of the world. (2) ASSISTANT PROFESSOR in physical, chemical, or biological limnology/oceanography to conduct research on large lakes worldwide. Ph.D. in limnology, oceanography, or related field is required at the time of appointment. The Search Committee will begin to review complete ap-plications on 8 November 2002 and will accept applications until the position is filled. For details and information on how to apply, visit the website: http://www.d.umn.edu/llo. The University of Minnesota is an Equal Opportunity Educator and Employer.

ASSISTANT CURATOR (Tenure Track) Museum of Natural Sciences

Required qualifications: Ph.D. in biology, zoology, or related discipline; curatorial experience in a research collection of amphibians and reptiles. Additional qualification desired: experience with computer-based collection database management. Responsibilities: teaches classes, curates collection, conducts research. Salary will be commensurate with qualifications and experience. Anticipated hire date is July 1, 2003. Application deadline is November 27, 2002, or until candidate is selected. Submit résumé (including e-mail address) and letter of interest to: Herpetology Search Committee, Museum of Natural Science, 119 Foster Hall, Louisiana State University, Reference Number 000245, Baton Rouge, LA 70803.

Louisiana State University is an Equal Opportunity/Equal Access Employer.

GRANTS

Creating the future of biotech—Together

Invitrogen's Research Tools Development Grants Program provides funding for investigators developing innovative tools for use in life science research, including investigators working in academics, not-for-profit institutions, and for-profit companies. Total funding is US\$5 million per year, with annual individual awards of up to US\$100,000. Grants are provided quarterly; each quarter focuses on a specific field of interest.

Fourth quarter 2002 funding is for the area of **amplification**, **labeling and quantitation** of nucleic acids—including proposals for the *in vitro* or *in vivo* applications of detection, expression, hybridization, microarrays, and screening. Deadline for full Grant Proposals is December 1. A preproposal is required prior to submitting a Grant Proposal. For more information, visit www.invitrogen.com, e-mail grants@invitrogen.com, or call 800 955 6288, ext. 66140.

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MOLECULAR REGENERATIVE MEDICINE

Cellular and Molecular Biology Division Toronto Western Research Institute (TWRI) University Health Network (UHN)

TWRI is a multidisciplinary research centre affiliated with the University of Toronto located at the Toronto Western Hospital, UHN. It has strong basic research programs in Neuroscience, Vision and Immunology together with complementary clinical research programs. The Cellular and Molecular Biology Division is recruiting a molecular biologist/ biochemist to establish an independent, externally funded research program with a focus in regeneration and/or development. We seek an individual with a strong record of achievement, an exciting vision, and an interest in collaborative research. The successful candidate will be employed by the Institute at the Scientist level, and will also hold a faculty appointment (status only) at the University of Toronto. We seek an individual having a Ph.D. with a minimum of 3 years postdoctoral expertise in molecular biology, biochemistry, and development. This is a permanent full-time position.

Please submit electronically a letter of application, a CV, a statement of research interests and names/ addresses of three Referees by December 7, 2002 to: Elise F. Stanley Ph.D., Head, Cellular and Molecular Division, C/O Minnie Kim, Research Coordinator Toronto Western Research Institute at mkim@uhnres.utoronto.ca.

In accordance with Canadian immigration requirements this advertisement is directed in the first instance to Canadian citizens and permanent residents of Canada but all qualified individuals are encouraged to apply.

ANNOUNCEMENTS

The International Balzan Foundation is pleased to announce the winners of the

Balzan Prizes 2002

for Developmental Biology Prof. **Walter Gehring**, Switzerland for Geology

Prof. Xavier Le Pichon, France for Sociology Prof. Dominique Schnapper, France for History of the Humanities Prof. Anthony Grafton, USA

The Award-giving Ceremony of the Balzan Prizes 2002 will take place in Rome, Wednesday 13th November, in the presence of the President of the Italian Republic.

Balzan Commitment to Emerging Talent

Each Balzan Prize is worth 1,000,000 Swiss francs (£431,086 US \$667,459). In awarding the prizes, the Foundation asks prize-winners to set aside half the amount to support research projects and similar work preferably involving young scientists or scholars.

Next Balzan Awards

Balzan Prizes 2003

each worth 1,000,000 Swiss francs, will be awarded in the fields of:

- Genetics and Evolution
- Infrared Astronomy
- European History since 1900
- Social Psychology

Nominations should be submitted - by universities or learned societies - to the General Prize Committee of the International Balzan Foundation not later than **15th March 2003**.

Supporting documentation required:

- Justification for the candidate's nomination, including a list of his/her most important publications
- Complete biography, nationality, addresses, recent photo
- Curriculum vitae with present position/ function, main academic activities

Self-nominations are not accepted.

Contact address:

Comitato Generale Premi Presidente Sergio Romano Fondazione Internazionale Balzan "Premio" Piazzetta U. Giordano 4, I-20122 Milano, Italy Tel. +39-02-7600 22 12, Fax +39-02-7600 94 57 e-mail: <u>balzan@balzan.it</u>

The International Balzan Foundation is dedicated to recognising and rewarding outstanding individual achievement regardless of nationality, race or creed - in science, humanities, culture and humanitarian causes through a programme of prestigious annual prizes totalling 4 million Swiss Francs (£1.7 million, US \$ 2.6 million). With offices in Milan and Zurich, the Foundation is advised on its awards by a committee of 18-20 distinguished European scientists and academics. Over the last forty years, the Balzan Foundation has awarded over 33 million Swiss francs (£14.5 million, US \$ 22.4 million) to 87 international scientists. Uniquely among major international foundations, the Balzan Foundation chooses different subjects each year within the sciences and the humanities. This enables it to encourage emerging new research areas and to support important fields of study possibly overlooked by other major international Prizes.

For further information: e-mail: balzan@balzan.it - http://www.balzan.it

DIRECTOR OF BASIC SCIENCE RESEARCH

The Department of Otolaryngology/Head and Neck Surgery at the University of Arkansas for Medical Sciences is seeking the appointment of a senior Scientist for the position of Director of Basic Science Research in head and neck cancer. Applicants must have a Ph.D. or an equivalent degree and have a strong background in molecular biology. Applicants must also have prior experience in cancer research, preferably in the area of head and neck cancer. Priority will be given to applicants with current or prior NIH funding. Applicants will have the opportunity to pursue their own independent research as well as participate with clinicians in collaborative translational research. Areas of potential collaborative research include molecular assessment of cancer risk, carcinogenesis, metastasis, response to therapy, and novel biologic therapies including gene therapy and immu-The Department of Otolaryngology/ notherapy. Head and Neck Surgery has a large volume of patients with cancer of the head and neck and, together with the Arkansas Cancer Research Center, will provide a unique opportunity to build and support a strong research program in the area of head and neck oncology. Academic rank and salary will be commensurate with the applicant's experience.

Interested applicants should send curriculum vitae to: Ehab Hanna, M.D., Director of Head and Neck Oncology, Department of Otolaryngology/ Head and Neck Surgery, University of Arkansas for Medical Sciences, 4301 West Markham Street, Slot 543, Little Rock, AR 72205. E-mail: hannachaby@uams.edu. UAMS is an Equal Opportunity Employer.

STAFF ASSOCIATE POSITION Columbia University

A Staff Associate position is available at Columbia University. We are studying neuronal signaling involved in early stages of cortical development. Methods include patch clamp recording, neuroanatomical methods, calcium imaging in brain slices, and confocal microscopy. Candidate must have Ph.D., M.D., or equivalent degree. Experience in patch clamp recording is preferred, and additional training in moleculabiology or calcium imaging is desirable. Send curriculum vitae and names of three references to: Arnold R. Kriegtein, M.D., Ph.D., Department of Neurology, Columbia University College of Physicians and Surgeons, 630 West 168th Street, Box 31, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

CLINICAL RESEARCHER for glaucoma research organization. Implement clinical research projects as determined by Research Director including assessment of visual function and quality of life, community screening, and diagnostic imaging devices. Requirements: M.D. or foreign equivalent; two years in job offered or two years of clinical and research experience in glaucoma. Experience must include screening for, diagnosing, and treating glaucoma and designing and implementing glaucoma research projects. Must include one year of glaucoma research experience in assessment of visual function and quality of life, community screening, and imaging devices in diagnosis. Forty hours per week. Send résumé to: **Box 117, 1200 New York Avenue, N.W., Washington, DC 20005**.

ASSOCIATE RESEARCH SCIENTIST position in neurophysiology of vision available at the Mind/Brain Institute of the Johns Hopkins University. The candidate should have a strong interest in experimental and theoretical approaches to the neural mechanisms of object recognition and experience in single-cell recording (preferably visual cortex and/or IT cortex) in behaving macaques. Should have skills in computer programming (C++, Open GL) and data analysis. Send curriculum vitae to: Rudiger vonder-Heydt, Ph.D., Mind/Brain Institute, Johns Hopkins University, 338 Krieger Hall, 3400 North Charles Street, Baltimore, MD 21218. The Johns Hopkins University is an Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF FLORIDA

POSTDOCTORAL ASSOCIATE Department of Neurological Surgery

The Department of Neurological Surgery, College of Medicine, University of Florida, is seeking a Postdoctoral Associate to carry out research in the cellular basis of epilepsy. We utilize whole cell patch clamp recordings from neocortical slices and anatomical methods to study alterations in local circuitry in areas of cortical dysplasia and heterotopic gray matter. We also study synaptic plasticity in animal and human hippocampus. Salary will be commensurate with experience and academic qualifications. The anticipated starting date for this NIH-funded position is January 1, 2003, or as soon as possible thereafter.

Qualifications: Ph.D. in appropriate area of expertise. Experience in whole cell patch clamp recording from neurons is required. Applicants should submit a cover letter, curriculum vitae, and three professional letters of recommendation to:

Steven N. Roper, M.D. Department of Neurological Surgery P.O. Box 100265 University of Florida Gainesville, FL 32610

Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGIST

The Department of Microbiology invites applica tions for a tenure-track ASSISTANT PROFES-SORSHIP in microbiology to start August 2003. Ph.D. is required and postdoctoral training is a plus. The successful applicant will be expected to teach courses for students in prenursing and allied health programs, develop an upper-level/graduate course in their specialty, and mentor undergraduate- and Master's-level students. Research area is open. Submit a letter of application; curriculum vitae; reprints; statement of teaching philosophy; description of research interests; and three letters of recommendation to: Dr. Frank Paladino, Chair, Department of Biology, Indiana University/Purdue University, Fort Wayne, IN 46805-1499 by January 15, 2003. Department website: http://www.ipfw.edu/bio. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available in translational research laboratory of Steven T. Rosen at the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. Research focuses on molecular therapeutics with particular interest in mechanisms of glucocorticoid-induced apoptosis, resistance to glucocorticoids in hematologic malignancies, and drug development of novel purine analogs as cancer therapeutics. Basic skills in molecular biology are required and background in tissue culture and cancer biology are preferred. A successful candidate must have Ph.D. or M.D. and must be eligible for NIH training grant support (U.S. citizen or permanent resident). Send curriculum vitae and the names and addresses of three references to: Nancy L. Krett, Ph.D., Olson Building Room 8340, 303 East Chicago Avenue, Northwestern University, Chicago, IL 60611. E-mail: n-krett@northwestern.edu.

ASSOCIATE RESEARCH SCIENTIST position available immediately in the Department of Pharmacology at Columbia University. This is an opportunity to join an interdisciplinary team investigating the molecular basis of inherited mutation-induced rhythm disturbances in the heart. The applicant should have at least three years of postdoctoral research experience in molecular biology and/or biochemistry of membrane and signaling molecular proteins. Send curriculum vitae to: Dr. Robert S. Kass, Ph.D., Department of Pharmacology, Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

MARINE BIOLOGISTS. Florida International University (FIU) invites applicants for two tenuretrack **ASSISTANT PROFESSORSHIPS** in the Marine Biology Program. A new B.S. degree in marine biology is being offered by the Department of Biological Science, which has 40 faculty on two campuses. Construction of our new marine laboratory is scheduled to begin on FIU's Biscayne Bay Campus within the next few months. Benthic algal, seagrass, and mangrove communities are adjacent to campus and coral and pelagic ecosystems are nearby. Our waterfront campus offers ready access to the open ocean through nearby Haulover Inlet.

One position will emphasize invertebrate biology. The successful candidate will be expected to establish a vigorous research program using molecular methods and emphasizing population genetics, genomics, or regulatory biology in one or more invertebrate marine species and to teach courses on genetics and evolution. The second faculty position will have a research concentration in marine pelagic animals such as marine mammals, sharks, sea turtles, or large pelagic fishes with emphasis on sensory biology, neurobiology, or behavior and will be responsible for teaching General Biology II and other courses in an appropriate specialty. Extramurally funded research programs and the advisement of graduate students are expected.

Minimum qualifications: Ph.D. and postdoctoral experience in an appropriate field, success in teaching and research, and commitment to active participation in the Marine Biology Program and the Department of Biological Sciences. Applications must be received by December 15, 2002, and must include curriculum vitae, statements of research and teaching interests, reprints of up to three peer-reviewed publications, and contact information for at least four professional references. Apply to: Search Committee, Marine Biology Program, Florida International University, ACI 378, 3000 N.E. 151st Street, North Miami, FL 33181. Website: http://www.fiu.edu/~biology for more information on the Biological Sciences Department or website: http://www.marine.fiu.edu for Marine Biology Program announcements and updates. *Florida International University is an Equal Opportunity Institution that encourages diversity.*

A POSTDOCTORAL POSITION supported by an NIH grant is available to study the molecular mechanism of pancreatic beta cell adaptation and development on transgenic/diabetic animal models. Applicants must have a Ph.D. or M.D. degree with experience in molecular biology, biochemistry, metabolism, immunohistochemistry, cell culture, insulin secretion, and animal surgery. Good communication skills are essential. Send curriculum vitae and three references to: Dr. Ye Qi Liu, Kosair Children's Hospital Research Institute, Department of Pediatrics, University of Louisville School of Medicine, 570 South Preston Street, Suite 304, Louisville, KY 40202. Telephone: 502-852-2654; email: yqliu001@gwise.louisville.edu.

Molecular pharmacology **POSTDOCTORAL POSITION** to study mechanisms of sedatives and anesthetics at GABA-A receptors and other ion channels. A Ph.D. with experience in electrophysiology is required. Skill in molecular biology, cell expression, and/or protein chemistry desirable. Send curriculum vitae and names of three references to: **Stuart A. Forman**, M.D., Ph.D., Anesthesia and Critical Care, **CLN-3**, Massachusetts General Hospital, Boston, **MA 02114**. E-mail: saforman@partners.org; FAX: 617-724-8644. MGH is a Hanrad-affiliated hospital and an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS CANCER BIOLOGY RESEARCH Johns Hopkins University School of Medicine

NIH-funded positions to study HMG-I/Y in cancer. Send curriculum vitae/references to: Dr. L. Resar, Johns Hopkins University SOM, 720 Rutland Avenue, Ross Research Building, Room 1125, Baltimore, MD 21205. Telephone: 410-955-6132; FAX: 410-955-8208; e-mail: Iresar@ jhmi.edu.

GRANTS



SBS Endowment Fund

Т

Let he Society for Biomolecular Screening has established an endowment for a small grants program. These grants will provide start-up funding for research projects with potential to advance the disciplines, technologies and skills involved in these areas. The program is intended to support projects that may have an applied focus or those that may involve radically new concepts. This year, there are a total of three grants available: two for research projects and one for an education program.

Eligibility: Applicants must be employed full time in a college, university or not-forprofit research institute in order to serve as principal investigators (PI). Applications are considered without regard to race, religion, national origin, physical handicap or age of the candidates.

Deadlines: Applications must be received by February 14, 2003. Reviews will be conducted from March through May and notifications of awards will be done by June. Awards will be made to the applicant's institution and funds will be transferred on or about June 15.

The Society for Biomolecular Screening's mission is to further the science and application of Molecular Discovery by supporting basic research and training in academic institutions.

Further information for submitting applications is available on the SBS website at www.sbsonline.org.

The Society for Biomolecular Screening | 36 Tamarack Ave., #348 | Danbury, CT 06811 | USA Tel: +1 203 743 1336 | Fax: +1 203 748 7557 | E-mail: email@sbsonline.org





Smithsonian Tropical Research Institute

The Smithsonian Tropical Research Institute (STRI), a division of the Smithsonian Institution headquartered in the Republic of Panama, offers fellowships for research conducted with the advice and guidance of its staff members. Disciplines include ecology, anthropology, paleontology, evolution, systematics, behavior and physiology of tropical plants and animals.

Earl S. Tupper 3-year postdoctoral fellowship (deadline: Jan 15). Applications should include detailed research proposal with budget, curriculum vitae, 2 letters of reference, names and telephone numbers of 3 additional references and reprints of most important papers. Applicants should consult with STRI scientist who will serve as advisor before submitting final application. Annual stipend up to \$30,000 with yearly travel and research allotments. Proposals that include comparative research in other tropical countries will be considered. Send inquiries and application to STRI/Office of Education, Unit 0948, APO AA 34002-0948, from US or Apartado 2072, Balboa, Panama from Latin America, fellows@tivoli.si.edu or www.stri.org

Predoctoral, postdoctoral, senior postdoctoral (up to 1 year) and 10-week fellowships. Available through the Smithsonian's Office of Fellowships, Washington, DC. (deadline: Jan 15). For information: OFG, 750 9th Street NW, Suite 9300, Washington DC 20560-0902, siofg@ofg.si.edu, www.si.edu/research+study.

Three-month fellowships (deadline: Feb 15, May 15, Aug 15, Nov 15) thru STRI. For information: **STRI/Office of Education, Unit 0948, APO AA 34002-0948, from US or Apartado 2072, Balboa, Panama from Latin America, fellows@tivoli.si.edu or www.stri.org**.

Awards are based upon merit, without regard to race, color, religion, sex, national origin, age or condition of handicap of the applicant.

COURSE

First Course on Molecular Mechanisms in Brain Tumors February 12-16, 2003 Del Lago Resort, Houston, Montgomery County, TX 77356

Organizers: Abhijit Guha (University of Toronto), Eric Holland (Sloan-Kettering Cancer Center), and Sadhan Majumder (University of Texas M. D. Anderson Cancer Center)

Applications are invited from medical and graduate students, postdoctoral fellows, and clinicians and scientists. The course will provide a clinical overview of brain tumors and emphasize contemporary research in molecular mechanisms involved in the growth and development of brain tumors with special emphasis on molecular signaling mechanisms, neural stem cells, mouse models, genomics, imaging techniques, transgenic and knock-out mouse techniques, biobanks, and mechanism-based therapeutic strategies. Attendees will be able to interact with senior investigators on a one-to-one basis in an informal environment. The course is limited to 30 learners. The course fee of \$500 will include housing, meals, and course materials. Please send a curriculum vitae and a one-page description on how the course will help you in your career objectives by December 15, 2002, to: Sadhan Majumder, The Brain Tumor Center, M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Unit 11, Houston, TX 77030 or by e-mail to: majumder@mdanderson.org. Applicants will be notified of their application status by December 20, 2002.

Confirmed Faculty:

Francis Ali-Osman, Mary Anderlik, Richard Behringer, Melissa Bondy, Dai Fukumura, Greg Fuller, James Goldman, Abhijit Guha, Eric Holland, Mark Israel, Ed Jackson, C. David James, Victor Levin, Guillermina Lozano, Sadhan Majumder, Chris Meyers, Gordon Mills, Ray Sawaya, Charles Stiles, Albert Wong, W.K. Alfred Yung, and Wei Zhang.

American Brain Tumor Association



MEETINGS and ANNOUNCEMENTS



Pennington Biomedical Research Center, a Louisiana State University facility, is accepting applications for **RESEARCH ASSOCIATE** and **POSTDOC-TORAL RESEARCHER** positions. For information on employment options, see our **website:** http://www.pbrc.edu.

Pennington Biomedical Research Center is an Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSISTANT POSITIONS Neural Stem Cells

Two Postdoctoral/Research positions are immediately available to work on differentiation and cancer of mammalian neural stem cells involving neural stem cells, transgenic/knockout mouse models, and chromatin structure. For examples of recent research projects, see: Mol. Cell. Biol. 21:5531-5540, 2001; Nature Medicine 6:826-831, 2000; Nucl. Acids Res. 28:3403-3410, 2000; J. Biol. Chem. 274:8002-8011, 1999; EMBO J. 16:1721-1731, 1997; website: http://www3. mdanderson.org/~genedev/majumder.html. Ex-cellent experience in biochemistry, molecular biology, or developmental biology is required. Please send curriculum vitae and names and addresses of three references to: Sadhan Majumder, Department of Molecular Genetics, University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Box 11, Houston, TX 77030. Telephone: 713-792-8920; FAX: 713-792-6054; e-mail: majumder@mdanderson.org. Equal Employment Employer/nonsmoking environment

A POSTDOCTORAL POSITION is available to investigate the role of protein aggregation in various models of neurodegeneration. Applicants should have a Ph.D. in the biological sciences and experience with primary cell culture, protein biochemistry, and immunocytochemistry. Please send curriculum vitae and the names of three references to: Dr. Lucia Notterpek, Department of Neuroscience, P.O. Box 100244, McKnight Brain Institute, University of Florida, Gainesville, FL 32610. E-mail: notterp@ufbi.ufl.edu. The University of Florida is an Equal Opportunity/Affirmative Action Institution.

SCHOLAR NIH SICKLE CELL CENTER

Ph.D. in cell biology or biochemistry; minimum of two years of postdoctoral experience; interest in vascular biology. Send curriculum vitae and three references to: Marie J. Stuart, M.D., Department of Pediatrics, Jefferson Medical College, Suite Number 727, 1025 Walnut Street, Philadelphia, PA 19107. Telephone: 215-955-9820; e-mail: marie.stuart@ mail.tju.edu. Equal Opportunity Employer.

MICROBIAL MOLECULAR GENETICS

POSTDOCTORAL POSITION for development of new antibiotic mechanisms based on bactericidal genes of *B. subtilis* bacteriophage SP01. Analysis of mechanisms by which these genes remodel the host cell to optimize it for phage reproduction. Please send curriculum vitae, summary of research experience, and three references to: Dr. Charles Stewart, Department of Biochemistry and Cell Biology, Rice University, P.O. Box 1892, Houston, TX 77251. E-mail: crs@bioc.rice.edu. Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for a Ph.D. Scientist with a strong background in molecular and cellular biology. Projects focus on the role of the Src tyrosine kinase in intestinal cell growth control. Funding is through an NIH grant. Candidates must be U.S. citizens or permanent residents with a Ph.D. degree. Send curriculum vitae to: Chris Cartwright, M.D., CCSR Building, Room 3115C, 269 Campus Drive, Stanford University, Stanford, CA 94305-5187. E-mail: chris.cartwright@stanford.edu. FAX: 650-723-5488.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Three Postdoctoral positions are available at the Center for Environmental Biotechnology (website: http://www.ceb.utk.edu) at the University of Tennessee, Knoxville. These positions are suited for individuals highly motivated for interdisciplinary team research on DARPA-, NSF-, DOE-, NASA-, and U.S. Department of Agriculture-sponsored projects. Excellent science and engineering collaborative opportunities exist on campus as well as through cooperative efforts with Researchers in microelectronics, complex systems analysis, and nanoscience at Oak Ridge National Laboratory.

EUKARYOTIC MOLECULAR BIOLOGIST. The successful candidate will build on successful research in the development of bioluminescent bioreporters in yeast and mammalian systems for the detection of compounds with environmental significance. Candidates should be experienced in the cloning and expression of bacterial genes in eukaryotic systems and have a thorough understanding of eukaryotic physiology. **PROKARYOTIC MOLECULAR BIOLO-**

PROKARYOTIC MOLECULAR BIOLO-GIST. The successful candidate will contribute to a research program in the development of bioluminescent bioreporters in bacterial systems for the detection of compounds with environmental significance and the detection of biological pathogens. The candidate should be experienced in the cloning and expression of bacterial genes. The qualifications for these two positions include a Ph.D. in molecular biology or microbiology and evidence of scientific productivity. BIOMICROELECTRONICS POSTDOC

BIOMICROELECTRONICS POSTDOC-TORAL. The successful candidate will support advanced research in areas of biosensor technology, *in vivo* cell logic development, BIOSPICE, and nanobiomaterials development. A major emphasis of the research program is exploiting molecular and nanoscale tools for environmental biosensing, processing, and analysis. Strong molecular or analytical skills are expected. Required qualifications include a Ph.D. with experience in molecular biology; microbiology; analytical chemistry; or electrical, chemical, or materials engineering.

All candidates are expected to have strong oral and written skills and be able to work independently and as part of an integrated research team. These positions are available immediately for two years and are renewable depending on satisfactory performance and availability of funds. The positions are open to all qualified U.S. and non-U.S. citizens who are authorized to work in the United States. Applicants should send a letter outlining research interests; curriculum vitae; reprints or drafts of any relevant publications; and the names, e-mail addresses, and telephone numbers of three references to: Dr. John Sanseverino, The Center for Environmental Biotechnology, University of Tennessee, 676 Dabney Hall, Knoxville, TN 37996-1605. E-mail: jsansev@utk.edu.

POSTDOCTORAL POSITIONS Georgetown University Medical Center

Three Postdoctoral positions are available immediately to study signal transduction pathways associated with human genetic disease and/or cancer progression. The projects include molecular and biochemical analyses, isolation of novel genes, DNA array gene expression profiling with bioinformatics, developing proteomic assays, and clinical translation studies for gene therapy. Recent Ph.D. training in molecular or cellular biochemistry. Prefer qualified candidates who are motivated, creative, independent, and experienced in these areas and less than five years of postgraduate. Send curriculum vitae and names of three references to: Mira Jung, Ph.D., Associate Professor, Department of Radiation Medicine, Division of Radiation Research, Georgetown University Medical Center, 3970 Reservoir Road, N.W., E211A, The Research Building, Washington, DC 20057-1482. E-mail: jungm@georgetown.edu; FAX: 202-687-0400.

Georgetown University is an Equal Opportunity/Affirmative Action Employer. POSITIONS OPEN



POSTDOCTORAL POSITION Available Immediately

Postdoctoral position available immediately to study DNA damage and repair related to the development and progression of Type 2 diabetes. Candidates must have an M.D., Ph.D., or M.D./Ph.D. degree and a demonstrated expertise in the methodologies commonly employed for the study of DNA damage and repair. Lack of this specific track record will make the candidate noneligible. Send curriculum vitae and three references to: Dr. Riccardo Perfetti, Division of Endocrinology and Metabolism, Becker Building B-131, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, CA 90048. FAX: 310-652-7987; e-mail: perfettir@cshs.org.

MULTIPLE POSTDOCTORAL RESEARCHER POSITIONS

The Department of Pediatrics at the Louisiana State University School of Medicine in New Orleans has openings for multiple Postdoctoral Researcher positions. Candidates must have a Ph.D., M.D., or other terminal degree in basic or health sciences with a B.S., B.A. in biological or chemical sciences. At least one year of research experience in a biology or chemistry laboratory. Evidence of developing independent research ability. This is an NIH-funded project to study the participation of Candida albicans cell surface moieties in pathogenesis of candidiasis (Dr. Jim E. Cutler). Desired but not required: strong biochemistry and molecular biology training. The willingness to work with experimental animals. Superb aseptic technique and superb quantitative and technical skills as applied to making of chemical reagents. This position is based at the Reserch Institute for Children, Children's Hospital, New Orleans. Qualified candidates may submit curriculum vitae to: Timothy Pierce, Faculty Affairs Coordinator, The Research Institute for Children, Children's Hospital, 200 Henry Clay Avenue, New Orleans, LA 70018. E-mail curriculum vitae to e-mail: tpierce@chnola-research.org. Louisiana State University Health Science Center is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP VIRAL HEPATITIS National Institutes of Health Department of HHS

Postdoctoral positions are available to study the molecular pathogenesis of viral hepatitis B and C. Research projects focus on virus-cell and virus-host interactions and the molecular, cellular, and pathogenic consequences of such interactions with particular interest in novel vaccine and antiviral development. Training in molecular biology, virology, and tissue culture is required and experiences with protein expression, immunologic techniques, and mouse work are strongly preferred. For more detailed information, please search website: http://nidb.nih.gov/search/search-_Year.taf for Jake Liang. Applicants should have an M.D. or Ph.D. and should have less than five years of postdoctoral experience. Applicants should send curriculum vitae and three letters of reference to: Dr. T. Jake Liang, LDS, NIDDK, NIH, Building 10-9B16, 10 Center Drive, Bethesda, MD 20892-1800. HHS and NIH are Equal Opportunity Employers.

POSTDOCTORAL POSITION Washington University School of Medicine

Applications are invited to study the genetics and cell biology of transition metal homeostasis in human health and disease. Current efforts are focused on human neurodegenerative diseases and the cell biology and biochemistry of ATPases and metallochaperones that deliver metals to specific targets within the cell (website: http://peds.wustl.edu./ faculty/Gitlin_Jonathan_D). Send curriculum vitae and references to e-mail: gitlin@kids.wutsl. edu. Washington University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION Bioinformatics, Microbial Genomics, and Biodefense University of Alabama at Birmingham

A Postdoctoral position is available immediately to participate in research focused on the development of microbial databases and analytical tools to study the pathogenesis of microorganisms with an emphasis on developing bioinformatic resources to aid current biodefense research initiatives. Candidates with a Ph.D. or equivalent in either the biological or computer sciences and experience in bioinformatics, microbial genomics, or microbiological research will be considered. Interested candidates should apply to: Elliot J Lefkowitz, Ph.D., Department of Microbiology, The University of Alabama at Birmingham, BBRB 276/11, 1530 Third Avenue South, Birmingham, AL 35294-2170. E-mail: elliotl@uab.edu; website: http://www.genome.uab.edu. Application deadline: December 31, 2002. UAB is an Affirmative Action/Equal Opportunity Employer.

Two funded **POSTDOCTORAL POSITIONS** are available immediately to study eukaryotic DNA replication and the DNA damage response. Applicants should have a Ph.D. in biochemistry or molecular biology and have a demonstrated track record in genetics, DNA cloning, or protein expression and purification. Experience with the yeast *S. cerevisiae* is desirable. The laboratory uses genetic and biochemical approaches to study the interaction of replication forks with damaged DNA templates, mechanisms of DNA damage signaling, and recombinationmediated DNA repair. Applicants should send curriculum vitae and contact information of three references to: Steven Brill, Department of Molecular Biology and Biochemistry, Rutgers University, 679 Hoes Lane, CABM Number 304, Piscataway, NJ 08854. E-mail: sjbrill@rci.rutgers.edu

POSTDOCTORAL POSITIONS available in the Division of Molecular Medicine, Department of Anesthesiology, University of California, Los Angeles, for molecular and biophysical studies of voltage dependent K⁺ and Ca²⁺ channels. The positions are for highly motivated individuals, ideally with experience in electrophysiology, molecular biology, and fluorescence techniques. The successful candidate will combine optical and electrophysiological techniques to investigate conduction properties and conformational changes in ion channel during activity. A Ph.D. is required. Please send curriculum vitae and three letters of reference by e-mail to: e-mail rolcese@ ucla.edu or by mail to: Dr. Riccardo Olcese, UCLA, Division of Molecular Medicine, Department of Anesthesiology, Box 957115, Los Angeles, CA 90095-7115. UCLA is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Postdoctoral positions are immediately available to study skeletal development. Candidates should have a Ph.D., M.D., D.M.D., or an equivalent degree and experience in molecular biology and mouse genetics.

Applicants should submit complete curriculum vitae and the names of three references by November 30, 2002, to: Dr. Beate Lanske, Harvard Department of Oral and Developmental Biology, The Forsyth Institute, 140 The Fenway, Boston, MA 02115. E-mail: blanske@forsyth.org.

The Harvard School of Dental Medicine/Harvard University is an Equal Opportunity Employer that encourages applications from minority group members and women.

A **POSTDOCTORAL POSITION** is available at the University of Michigan on an NIH-funded project to study signaling mechanisms in hematopoietic cell growth and survival. We use biochemical, microarray profiling, and genetic (retroviral gene transfer and RNAi) techniques. Highly interactive environment offers many career opportunities. Candidates should have recent Ph.D. in a relevant area. See **website:** http://sitemaker.umich.edu/awmlee. Send cover letter, curriculum vitae, and three references to e-mail: awmlee@umich.edu. Equal Opportunity/Affimative Action Employer.

POSITIONS OPEN

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BACTERIAL PATHOGENESIS POSTDOCTORAL RESEARCH ASSOCIATE

position is available immediately to join an NIHfunded research group studying bacterial pathogenesis. Selected individual will be primarily responsible for conducting independent research on bacterial pathogens and publication of results. Research will emphasize the molecular and cell biological characterization of virulence determinants in mycobacteria, Legionella, and/or other bacterial respiratory pathogens. A Ph.D. is required and a record of productive experience in bacterial pathogenesis preferred. Send curriculum vitae and names and addresses of three references postmarked by January 1, 2002 (or until a suitable candidate is found), to: Dr. Jeffrey D. Cirillo, Attention: Ms. Pat Martinez, Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, P.O. Box 830905, 120 VBS, Lincoln, NE 68583-0905. Telephone: 402-472-8539; FAX: 402-472-9690; e-mail: pmartine@unlnotes.unl.edu. University of Nebraska–Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity, is responsive to the needs of dual-career couples, and assures reasonable accommodation under the Americans With Disabilities Act.

POSTDOCTORAL POSITION at the Fox Chase Cancer Center; website: http://www. fccc.edu. The project involves investigating 3-D adhesions and their implications in tumor microenvironment dynamics (*Science* **294:**1708; *Curr. Opin. Cell Biol.* **14:**633). Full-time position; annually renewable. Applicant must have completed a Ph.D. or equivalent foreign degree by starting date and have extensive experience in cell biology techniques including confocal and live microscopy as well as digital imaging analyses. Candidate most possesses excellent communication skills. Send curriculum vitae and the names of three references to: Edna Cukierman, Ph.D., Fox Chase Cancer Center, c/o Human Resources, 7701 Burholme Avenue, Philadelphia, PA 19111. E-mail: e_cukierman@fccc.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS supported by the NIH are available in the Section of Nephrology at the University of Chicago. Research topics include immunopathogenesis of experimental renal diseases, apoptotic antigens and autoimmunity, novel macrophage signaling pathways, and study of renal transport mechanisms. Investigative work can take advantage of a fully operational microarray facility controlled by the Section. Applicant must have a Ph.D. and/or M.D. degree and be a U.S. citizen or permanent resident. Expertise in cellular and molecular biology, signal transduction, and/or immunology is essential. The start date can be as early as October 1, 2002. Submit curriculum vitae including three references to: **Dr. Jerrold Levine; e-mail: jlevine@medicine.uchicago.edu**. Affiramtive Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP position is available to study mechanisms of pulmonary vascular reactivity. Experience with fluorescence microscopy, patch clamping, cell culture, and/or molecular biology is desirable. Send curriculum vitae and three letters of reference to: J.T. Sylvester, M.D., Division of Pulmonary and Critical Care Medicine, The Johns Hopkins Asthma and Allergy Center, 5501 Hopkins Bayview Circle, Baltimore, MD 21224. FAX: 410-550-2612; e-mail: jsylv@jhmi.edu.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

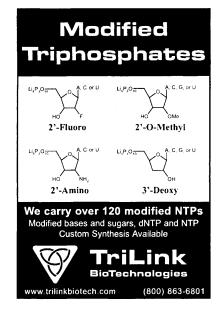
The Department of Math and Science invites applications for a full-time, tenure-track faculty position available fall 2003. The selected candidate will develop and teach required science courses and biology electives for nonscience majors. We seek candidates who are interested in interfaces between biology and art, design, and architecture. Teaching experience is required; a Ph.D. is strongly preferred. Please submit curriculum vitae; letter of application; and contact information for three references by December 2, 2002, to: Biology Search Committee, School of Liberal Arts and Sciences, DeKalb 3, Pratt Institute, 200 Willoughby Avenue, Brooklyn, NY 11205. Equal Opportunity Employer.

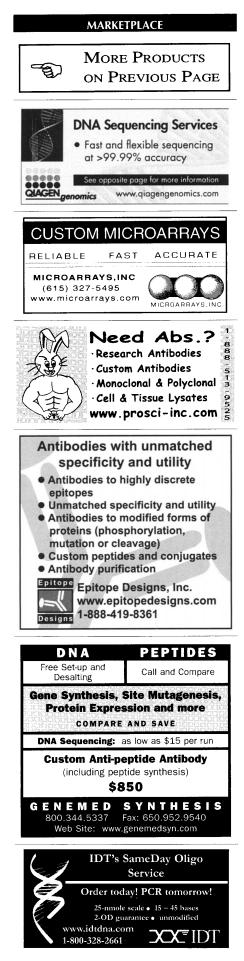
ENVIRONMENTAL SCIENCE

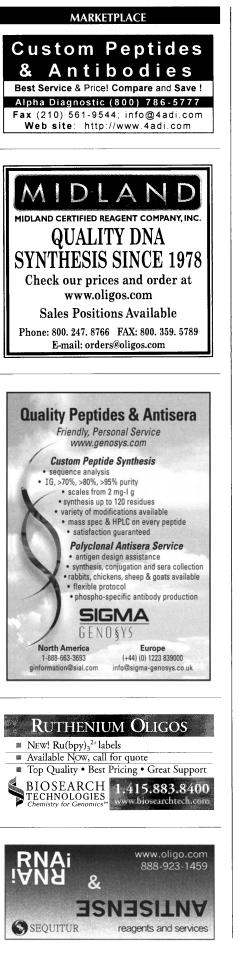
The Department of Environmental Science at the University of San Francisco (USF) invites applications for a tenure-track **ASSISTANT PROFESSOR** position as an Environmental Scientist or Engineer with expertise in environmental risk assessment or management. Formal areas of training and research may include but are not limited to environmental health or air quality. For details, please see **website:** http://www.usfca.edu/hr. USF is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available in immunology/immunotoxicology. Studies involve CD 44-endothelial cell interactions and tumor rejection, cord blood cell differentiation, and apoptosis induction by environmental pollutants and cannabinoids. Ph.D. in immunology, molecular/cell biology, biochemistry, or related discipline required. Send curriculum vitae and three references letters: Dr. Mitzi Nagarkatti, Department of Microbiology and Immunology, Box 980678, Medical College of Virginia Campus, Virginia Commonwealth University, Richmond, VA 23298-0678. Virginia Commonwealth University is an Equal Employment Opportunity/Affirmative Action Employer.











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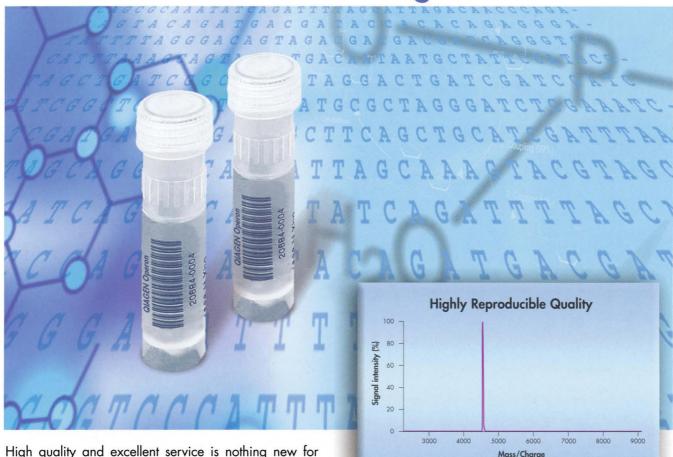
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